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*THE OUTLINE SERIES*

*Edited by Harold Herd*

# AN OUTLINE COURSE IN GENERAL CULTURE

FLEET PUBLICATIONS  
9, PALACE GATE, LONDON, W.8

FIRST PUBLISHED IN 1932  
SECOND IMPRESSION 1934

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## Chapter I

### THE STEPPING-STONES OF HUMAN PROGRESS

WE still have only the most fragmentary knowledge of man's climb from savagery to civilisation. It is impossible to say definitely at what date in the world's history true man appeared. Skeletal remains have proved that right back in the dim ages—thousands of years ago when the earth was in the grip of ice—there lived creatures who are known as man's precursors ; but not, it should be carefully noted, his direct ancestors. The most famous of the quasi-human beings is the Upright Ape Man (*Pithecanthropus Erectus*), part of whose skeleton was discovered in Java in 1891. There was also the Heidelberg Man, so called because it was at Heidelberg that his massive jaw was unearthed, and either before or after him came the Dawn Man (*Eoanthropus*), who must have been very much like an ape in appearance.

Another species of sub-man was the Neanderthal. It is thought that during the early stages of his history the earth was passing through a warm period, but when the climate grew intensely cold he sheltered in caves and wore the skins of beasts. He had strongly marked ridges over his eyes—as the apes have—a low forehead, flat nose and a massive jaw. His legs were much shorter than those of modern man, and it seems that he did not walk erect. The Rhodesian Man, whose skull was found at Broken Hill, Africa, in 1921, was in advance of the Neanderthal. His features were still ape-like, but his brain was more developed and he probably walked more erect.

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True man arrived when the Cro-Magnard—he takes his name from the Cro-Magnon cave in the Dordogne, France, where his skeleton was found—came on the scene. He and his kind were savages, magnificent in build and big-brained. They hunted animals with spears and had considerable artistic skill, being able to carve and paint.

Man enters a new phase when the Neolithic (New Stone) Age is reached. Now he tills the soil, sows seed and domesticates animals. Villages are built and some form of religious ceremonial is practised. Sacrifices are offered to deities and the dead are mummified. It has been suggested that Stonehenge was erected in commemoration of the dead by men who lived at this time.

First, it will be seen, man was a hunter, not very far removed from the animals he killed with his weapons of stone. Then he became a herdsman, taming and guarding flocks and, in his leisure hours, trying his hand at art and aiming at intellectual development. From this point it is not a long way to the agricultural stage when he settled down near the cultivated land on which he grew food for his family and the community to which he belonged. He had now acquired the responsibilities of the property owner, and knew that he who has learnt what discipline means is the master of the man who has not.

The first civilised communities were established in Mesopotamia and Egypt. On the fertile, irrigable lands near the great rivers Nile, Euphrates and the Tigris grew up the first important cities—Sumerian communities at Nippur and Eridu date

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from 6000 B.C. The Sumerian people of Babylonia built temples of brick and wrote in clay, signing their clay documents with seals. They were able to make use of bronze, gold and silver, but knew nothing about money, trade being carried on by barter. Men shaved themselves and wore garments of wool and carried spears and shields when they went out to fight. Although they kept cattle they had no horses. These belong to a later period, being introduced, it is believed, from Arabia into Egypt about 1500 B.C. Life centred round the temple and the chief priest was the ruler of the city.

While men and women of the cities were leading settled lives other peoples were wandering about, driving their sheep from pasture to pasture, trading with the various communities they chanced to find, and making raids. Hordes of Semites, nomads from Arabia and Syria, conquered all the territory held by the Sumerians, and on that conquest was founded the Babylonian Empire over which ruled Hammurabi, who drew up the first code of laws.

During the first dynasties of Egypt, which are placed between 4000 and 3000 B.C., art rose to a remarkably high level. Architecture steadily improved. The building of the Pyramids—the tombs of the kings—was an undertaking that seems colossal even in these days of stupendous achievements. One hundred thousand men were engaged for twenty years in building the Great Pyramid for King Cheops.

As dynasty succeeded dynasty in Egypt culture increased and life grew more complex. In the chief cities of both Egypt and Mesopotamia the well-to-do were able to enjoy many of the comforts and refine-

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ments that soften life for modern man. Those who could afford to do so lived in beautiful houses and wore beautiful clothes, for fine linen was now available. The horse was used to draw war chariots and to add to the dignity of State shows. Practical arts such as glass-making were cultivated. Human sacrifices were no longer part of religious ceremonies. Geometry, astronomy and mathematics were originated and developed. Modern Europe owes a great deal to the culture of the early Egyptians.

Babylon also became a centre of literary culture. A wonderful collection of clay writings has been unearthed in Chaldea to bear witness to the literary culture of the sixth century before Christ.

Recent exploration has revealed that another civilisation was flourishing in Crete by 2500 B.C. In the City of Cnossos the king lived in a splendid palace fitted with bathrooms. Chairs were in use, and architectural decoration was of a high order. Some remarkable pottery was produced. The women wore stays and smart dresses and decked themselves out with jewels. We do not know what language these civilised people spoke because their inscriptions have not yet been interpreted.

It is also interesting to note that a high state of culture was attained about 1000 B.C. in Mexico, Yucatan and Peru, which is known as the Mayan Civilisation. The ruins of great buildings, some of them elaborately ornamented, altars, galleries and tennis courts have been brought to light.

Still another great civilisation grew up in China, and remained practically isolated from these de-

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velopments in Western Asia, and from all later developments in Europe until the time of Queen Victoria. When Rome was in its infancy the Chinese were building remarkable temples and suspension bridges, and making fine silks and articles of porcelain and bronze. China is the only ancient empire that has survived without a break until modern times.

Man's horizon widened as he began to spread out to make conquests. As tribes pushed farther and farther afield in search of trade the exchange and development of ideas was facilitated. The Phoenicians' trading ships went far and wide, and those who sailed in them learnt a great many useful things from the peoples with whom they came into contact. They also handed on their knowledge to less enlightened races. It was a Phoenician named Cadmus who taught the Greeks to read and write. The Phoenicians fired the Greeks to see more of the world and to found colonies. They showed them how to build fortresses and gave them ideas about navigation, engineering and the industrial arts.

The Greeks, who called themselves Hellenes, were a branch of the Aryan-speaking peoples (the common stock from which most European and many of the Indian races are descended). By the seventh century before Christ they had built many splendid cities, notably Athens, Sparta, Thebes, Miletus, etc. They had settled in Italy and Sicily and along the coast of the Black Sea. Marseilles was a Greek town. In the course of about two hundred years Greece gave birth to some of the world's greatest poets, sculptors, statesmen, philosophers,

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orators and soldiers. Wonderful temples—the Parthenon is an outstanding example—were designed. The best Greek sculpture has never been surpassed. Even the common craftsman of those days was an artist. The Greeks valued bodily strength and fitness very highly, and held periodical national festivals at Olympia and elsewhere consisting of athletic contests in honour of their gods.

Men now began to ask questions about the universe. Thinkers like Thales of Miletus tried to find out the origin of things and in so doing laid the foundations of science. Aristotle taught man to think logically. Socrates showed him how to reason.

Greek culture predominated in Egypt, Syria and Asia Minor, Mesopotamia and Babylonia for many years after the death of Alexander the Great, when the glory of Greece began to fade. Men of culture, who were not Greek by birth, wrote in Greek. The creative power of Hellenism waned, but the effects of her achievements were far reaching. In Egypt a great university was set up and every notable Greek book was kept there.

Before Greece reached the pinnacle of her greatness a new race—the Roman—that was to supersede her as the dominant nation in the Mediterranean region, was being cradled in the land we now call Italy. With hostile tribes around them the Romans were forced to become masters of the art of war: with their city built near the mouth of the Tiber they were enabled to develop an overseas trade. By the fifth century B.C. Rome was established as a commercial and military republic, and expanded rapidly, eventually conquering Greece and absorbing

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her spirit and culture. Thus the civilising influence of Greece was preserved and eventually passed on to the modern world.

Shipbuilding meanwhile had been steadily improving. Small ships gave place to triremes with three banks of oars pulled by one hundred and twenty men. By 264 B.C. the Carthaginians—inhabitants of Carthage, the powerful city on the north coast of Africa—had enormous ships with five banks of oars and a gigantic ram.

Only nomads had travelled in very early times. When good roads were made men were able to make journeys for pleasure and enlightenment. By the second century B.C. the Roman citizen who wanted to do so could leave the city in which he had been born and see something of outside interests. At this period Rome was the most highly civilised part of the world. Agriculture was the chief industry. Slavery is the big blot on the Roman records. Vast numbers of persons captured during conquests had no rights in the lands they owned when the Romans set up colonies. They were not entitled to legal marriage. To hurt a slave was not a crime against the man himself, only against his master. There were slaves kept specially for fighting in the arena and cultured slaves who set up schools and acted as tutors in prosperous families. Conditions improved in the first century after Christ.

Rome did a great deal to spread civilisation in the West. Gaul was notably affected by her culture. The Romanisation of Britain, although not a permanent influence, was a remarkable episode. The people of these islands had been living in the simplest,

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rudest way until the Romans settled here. They were encouraged to build comfortable homes and a change took place in their dress. Their children were educated. Roads were made and Britain was joined, as it were, to the rest of the civilised world.

Civilisation in this country practically disappeared with the conquest of the Anglo-Saxons. It returned when Christianity spread through the land and shed a new light on personal conduct. The monasteries, however, had done important work in keeping alive the spirit of culture during the difficult years when the barbarians overran the land. Here learning had continued, children had been educated and the poor had been cared for. Progress, you will realise, was not continuous. Civilisation has not been at the same level in all countries at the same period. Life during the time of the Roman Empire, for example, was immeasurably superior to life in the "Dark Ages" that followed.

This latter period is dark in the sense that the records of the life of the time are scanty. It is remarkable for two dramatic events: the fall of the Roman Empire before the inrush of Northern invaders, and the rise of the Franks under Clovis (the first great ruler to adopt the Christian faith). At the end of the Dark Ages the Franks under Charlemagne (A.D. 771-814) fought stirring battles on behalf of Christendom. Charlemagne became emperor of the Western half of the Roman Empire, and although the Empire broke up after his death he established in Europe the ideal of a united Christian civilisation.

Alfred the Great and, later, William the Con-



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queror, brought England once more into closer contact with civilised ways and thought. For a time there existed here the most orderly government in the West. The Crusades, which drew men from England, France, Italy and Germany to the Holy Land, brought into being a sense of chivalry and honour for a common ideal. In going East to fight men got into touch with new ideas. The Middle Ages, on the whole, however, are marked by superstition and illiteracy. Books were scarce, for only manuscripts produced by hand were available. Fiction has given us glowing pictures of baronial life, but living for the masses was comfortless and disease was rife. Gradually a change for the better was achieved. The revival of learning which is known as the Renaissance shed a light into dark places. This was no sudden break with the ignorance of the Middle Ages, but a steady reaching out towards enlightenment. A study of the ancient classics showed men the freedom of thought for which they had been longing. Greek scholars had carried their learning into Italy and other parts of Europe, and slowly Greek culture and Greek thought had taken a firm hold among intellectual peoples. The invention of paper and printing made possible for the first time a wide exchange of ideas, and reading was no longer the privilege of the cultured few. With the spread of knowledge Latin ceased to be the only language, and the Bible, translated into English by John Wycliffe, was put within the reach of the ordinary man. Next in importance to the invention of printing was the appearance of the seaworthy, ocean-going ship.

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The Reformation, like the Renaissance, was a bid for freedom. On every side men were beginning to rebel against ignorance, despotism and intolerance. A wonderful spirit of adventure, embodied in men like Vasco da Gama, Columbus and Magellan, led to the discovery of new worlds, new avenues of trade, new hope for men chafing under civil and religious oppression. Unfortunately conquest was not always free from cruelty. The Spaniards when settling in America exercised the greatest brutality on the natives. As intellectual progress had been made servitude had been banished from Western Europe, but now colonisation brought in its train a new form of this evil. Columbus, we read, sent back Indian prisoners to be sold in Spain. The traffic in negro slaves from the West Coast of Africa began early in the sixteenth century. Negro slavery prevailed for many years in British colonies. In 1620 the first cargo of negroes from Guinea was sold to tobacco planters in Virginia. By 1790, 200,000 negroes had been imported into this state. Towards the end of the seventeenth century there was a general outcry in England against the whole horrible traffic. The Quakers were foremost in agitating for its discouragement. Men of standing, such as Sir Richard Steele, Cowper, Adam Smith, Sterne and John Wesley strongly denounced it. Petitions were sent to Parliament and, finally, in 1807, Lord Grenville's Bill for the abolition of the slave trade was passed. It was Earl Grey who succeeded in securing the complete abolition of slavery in 1833. Britain's example was followed in time by other European nations. It was slavery that caused the

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American Civil War, and led to the freeing of the negroes in the United States.

One of the most vital factors contributing towards industrial progress was an increased knowledge of metallurgy. Machinery developed as man learnt how to handle metals. Innumerable practical inventions brought about a revolution in industry. In 1750 there were no factories and smoky chimneys; by 1830 factory blocks had sprung up everywhere. The mechanical devices of Hargreave, Arkwright and Crompton had revolutionised the spinning industry, which had been further aided by Watt's steam engine, brought out in 1769. Man's productive power had increased enormously as he had pressed iron, coal, steam and machinery into service, but his worth as a labourer had steadily declined. Hours became longer and wages were often below subsistence level. Children—some of them mere babes—often worked fourteen hours a day without sitting down. Trade grew, but the masses of people had no share in the prosperity that resulted. Machinery had swept away the cottage spinners' means of livelihood; it produced the drudge and all the miseries of drudgery. Legislation and organisation were badly needed to remedy the evils of the mechanical revolution. Wise, humane men soon began to realise this. Sir Robert Peel's Factory Act helped to bring about better conditions for the child worker. Workers combined, and out of their misery and determination trade unionism was born, and grew steadily in the face of strenuous opposition.

The coming of the railways was an event of supreme importance. Stephenson's engine drew the

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world's first train on the Stockton and Darlington railway, which was opened in 1825. H. G. Wells, in his *Short History of the World*, gives an impressive illustration which helps us to realise the remarkable changes which came about with the development of the railroad: "After the Russian disaster, Napoleon travelled from near Vilna to Paris in 312 hours. This was a journey of about 1,400 miles. He was travelling with every conceivable advantage, and he averaged under five miles an hour. An ordinary traveller would not have done this distance in twice the time. There were about the same maximum rates in the first century A.D. Then suddenly came this tremendous change. The railways reduced this journey for any ordinary traveller to less than forty-eight hours. . . . They made it possible to carry out administrative work in areas ten times as great as any that had hitherto been workable under one administration. . . . In America the effects were immediate. To the United States of America, sprawling westward, it meant the possibility of a continuous access to Washington, however far the frontier travelled across the Continent. It meant unity, sustained on a scale that would otherwise have been impossible."

### EXERCISES

*(For the convenience of students)*

*Select three outstanding events in the history of human progress and show briefly how each has contributed to the welfare of mankind.*

*State what you know of the contributions of the ancient Greeks or the ancient Romans to civilisation.*

## *Chapter II*

### THE GREAT TEACHERS

IN one short chapter it is impossible to deal with all religions. As an introduction, however, to a study of religion, a brief sketch is given of the founders of the main religions of the present-day world.

#### *BUDDHA*

Siddhartha Gautama, called "The Buddha," meaning "the enlightened," was born, it is believed, somewhere about the year 550 B.C. He was the son of the ruler of a small State in India, and at nineteen married a beautiful girl. He was always grave and thoughtful: the well-to-do life in which he found himself wearied and disheartened him. A talk with an ascetic seems to have decided him to seek seclusion so that he might be able to find knowledge to lighten the burdens of mankind. In the middle of the night he slipped away unnoticed from his palace, not daring to kiss his sleeping wife and child farewell, and made his way to the Vindhya Mountains.

For some years he lived with five disciples, fasting rigorously and practising the severest penances. But the knowledge he sought was still hidden from him. The way he was following, he decided, did not lead to perfection. So he gave up fasting and, deserted by

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the bewildered ascetics who had so faithfully shared his retreat, wandered away alone. It was while he sat in meditation under a tree that enlightenment, which he had sought so long and earnestly desired, suddenly came to him.

It seems that at first he was doubtful about revealing this wisdom to men who might not understand, but finally he saw that it was his duty to let men share his vision. He began preaching at Benares, winning back the disciples who had lost faith in him, and continued to convert men of all classes until his death at the age of eighty-four. He taught that Desire lies at the door of all man's troubles, that until he has conquered greed, the longing for personal gain—all the cravings that hide him from enlightenment—he cannot find the highest good, Nirvana.

Buddhism was a protest against the power of the priests and the mass of ceremony they had built up. It asserted that all men were equal and that suffering sprung from selfishness. It radiated a spirit of charity to all men, urging parental respect, love of children and care of the sick and the needy.

The teaching of the Buddha did not spread with any rapidity until the reign of King Asoka, who ruled over a large empire in India during the third century before Christ. Asoka put Buddha's humane ideas into practice and gave every encouragement to the Buddhist teaching orders. When he died the Buddhist influences began to decline, and the Brahmins, who had always opposed it, eventually regained their power over the minds of the people. Although driven out of India, Buddhism took a

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firm hold in China, Tibet, Japan, Burma and Siam.

Buddhism underwent various changes in the countries that adopted it, and there are now many Buddhist schools of thought and sects. It stands freed from many of the superstitions that originally clung to it and has probably more than 450,000,000 adherents.

The sacred books of Buddhism are called the Tripitaka. They have been translated from Sanskrit into many languages.

### ZOROASTER

The personal history of Zoroaster—or Zarathustra—the founder of the religion of the Parsis (people of Pars, ancient Persia), is obscure. It is impossible to fix his date definitely or to give him a certain birthplace. Ancient writers say he lived about 5,000 years before the Trojan War; modern writers place him between the sixth and the fifth centuries before Christ. About his death there is the same uncertainty. The Avesta—the Bible and prayer-book of the Parsis—does not refer to it, but another Persian book says he was murdered.

We are unable to judge how much of the religion Zoroaster taught was new. He is genuinely considered to be the reformer of the old Iramian religion, which was polytheistic. Zoroaster, it seems, believed in one supreme God. He had received a message from the "Creator of All"—Ahura Mazda (which has become "Ormazd"). Ormazd is light and life, the origin of all that is pure. Below him are "Immortal Holy Ones." Fire was one of his symbols. Worship centred round

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the cult of fire, but it is incorrect to say that the Parsis worshipped it. They regarded it as the emblem of divine power and therefore sacred.

Ormazd is Good and Ahriman is Evil. Death being the work of Ahriman, a dead body was, and still is, regarded with horror by the Parsis, who put it on a Tower of Silence where vultures pick the flesh from the bones. To burn or bury it would defile earth and fire, which are sacred to Ormazd.

Zoroaster taught purity of soul and body, the love of truth, care of cattle and the destruction of harmful animals, such as snakes and vermin which were looked upon as agents of Ahriman. He believed that God had chosen him to save mankind from everlasting ruin. Often he said he had spoken with God. Man had been given free will by Ormazd and so could choose between good and evil. The power of Ormazd was increased and that of Ahriman weakened when man did a good deed or thought a good thought. Zoroaster looked to a time when Ormazd would be completely victorious over evil and unlimited happiness would reward the good.

Zoroastrianism gave place to Mohammedanism when Persia was conquered by the Arabs. There are now only a few Parsis left in Persia, but a number—said to be about 70,000—are to be found in and around Bombay.

### *LAO-TSE*

The foundations of Taoism, one of the religions of China, are to be found in the teaching of Lao-Tse. We are told he was contemporary with Confucius



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and that the great teachers did at some time meet (517 B.C., it is believed). He is supposed to have been the librarian at the court of Chow. An historical record relates that he gave up this work because of the degeneration of the dynasty and withdrew from men in order that he might write.

It is believed that he wrote the *Tao-Teh-King*. "King" means the warp of a web, implying very much the same as our own word "text," which is derived from the Latin word for "weave." Scholars have found his writings extraordinarily difficult to read. There is a lack of connection between the parts of the work, which are written in an ambiguous, compressed way.

The word "Tao" is difficult to translate. It is the symbol of a path, or way—the way of virtue. The way of Lao-tse was one of compassion and humility. He denounced war, and tried to show men the beauty of the simple life and the folly of seeking power and wealth. He taught humility, simplicity and self-abnegation. Probably he did not believe in a God. It was many years before this religion was shaped. The teaching of Lao-tse, like that of other teachers, was distorted and wrapped about with superstition.

Taoism has developed into something far removed from Lao-tse's teachings. It is polytheistic, and it abounds in superstitions that its founder would never have tolerated.

## CONFUCIUS

China's great sage, Confucius (Kung-fu-Tse), was born about 550 B.C. He was of aristocratic

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origin and lived in Lu, one of the many petty states into which China was then divided. The rulers of these states were always quarrelling. The Chinese called the period "the Age of Confusion." Confucius held official positions, but the persistent quarrels disheartened him and caused him to resign. He began to teach, gathering round him young men who wished to find a better way of living. In his fifty-second year he was made chief magistrate of the city of Chung-tu and the minister of crime. He became "the idol of the people," we are told. But his influence was growing too strong to please the authorities, and a counter-attraction in a party of beautiful women dancers was introduced to draw attention from him. The appeal seems to have been immediate and irresistible, and Confucius had to leave the place where he had prospered and to wander from state to state, looking for a prince who would take his counsel and set up a model government.

His end was sad. The lawlessness of his country and the corrupt state of society grieved him profoundly. The ruler he looked for could not be found. His words of wisdom fell, for the most part, on deaf ears, and he died neglected and disappointed.

The later years of his life were spent in revising China's sacred books, called the "Kings." The sayings of Confucius are contained in the *Lun Yu*, the record of his ways and utterances compiled by his disciples.

Confucius wanted to improve man's everyday mode of living. He said nothing about God or the soul. He did not speculate about an after-life. He urged men to venerate the old laws, to be noble so

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that they might build up a better world. He pleaded for a sound government and right living, but he never mentioned divine revelations. One of the wise rules he set forth was: "What you do not like when done to yourself do not do to others."

Although his teaching met with so little success in his lifetime, it flourished in years to come, and Confucianism became one of the state religions of China.

### *JESUS CHRIST*

It is impossible to say exactly when the story of Jesus Christ was written. A well-known scholar has suggested that Matthew set down some of His sayings while He was on earth, having been chosen especially by Jesus for this work. The fourth Gospel was published about the end of the first century. It is considered that St. Mark's Gospel—which lacks an end—is the oldest of the Gospels.

The year 4 B.C. is accepted as the probable date of the birth of Jesus, which took place in Bethlehem, a village of Judæa, in a stable. The publicity given to this event by the visit of the Wise Men aroused the jealousy of the tyrannical Herod. Believing that his sovereignty would be threatened by the coming of the Messiah about whom there had been so many prophecies, he issued an order that all boys under two years of age in Bethlehem were to be slain. The holy family escaped from this peril by fleeing into Egypt, returning when the death of Herod was announced. But when Joseph heard that Herod's son Archelaus had succeeded him he judged it best to go to Nazareth.

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Here, we are told, Jesus "grew, and waxed strong in spirit, filled with wisdom; and the Grace of God was upon him," and that He was "in favour with God and man." It seems certain that He did not receive the ordinary school training of the time. The Scriptures and Nature were His books.

At an early age He desired to know "His Father's business which He had to carry out." When He was only twelve He was found by Joseph and Mary, who had taken Him to Jerusalem for the Feast of the Passover, seated among the doctors of the Law, "both hearing, and asking them questions." To Mary's reproachful question, "Why dost thou treat us thus?" He replied: "How is it that ye sought me? Wist ye not that I must be about my Father's business?"

Beyond knowing that He worked at His trade—carpentry—by which He supported Mary and His brothers (for, presumably, Joseph was dead) we have no record of Him until He was thirty. Now, after living in obscurity, He suddenly came before the public as a preacher. John the Baptist had warned the people of the coming of the Messiah, urging them to repent "for the kingdom of heaven is at hand," and baptising the converts. Jesus received baptism at his hands.

Then came His great temptation in the wilderness, when He fought with the powers of evil and chose the path that was to lead Him to the Cross. His public ministry was very short, covering a period of between two and three years.

Tales of His miraculous healing power spread all over Syria. Some people looked on His miracles as the evidence of His divinity; others considered them

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to be nothing less than sorcery. But Jesus did not desire that He should be looked upon merely as a miracle-worker. He treated the sick because of His great compassion for the suffering—not because He wanted to be known as a worker of wonders. When He had cured a faithful leper of his disease He cautioned him to “tell no man”—a warning which was not heeded. While the multitude marvelled and sang His praises the Scribes and the Pharisees watched Him suspiciously. When they heard that He forgave sins they said He blasphemed against God; when He cast out devils they declared that He did so with the aid of the prince of devils.

He chose a simple, arresting mode of teaching, delivering great spiritual truths in parable form which appealed strongly to the type of people He addressed. He drew, too, His illustrations from the daily life of the people so that they could readily see His meaning. He mixed freely with the populace, sharing their interests, eating with them, entering into their problems.

The moment came for Jesus to assert openly that He was the Messiah. Sitting on an ass, He rode into Jerusalem, fulfilling the prophecy concerning the coming of Christ in Zechariah—“Behold thy King cometh unto thee . . . lowly, and riding upon an ass.” The people who had heard that Jesus was coming were in readiness to acclaim him with branches of palm trees, which they threw in front of Him as He went forward to the temple.

And all the time the hatred and fear of His enemies, the Pharisees and the Sadducees, had been growing. They planned to have Him arrested in

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secret—they dared not take Him openly because they feared an uproar among the people who believed in Him—and to have Him killed. Judas Iscariot accepted their bribe and led “a great multitude with swords and staves from the chief priests and elders of the people” to His place of retreat. Jesus was taken to the palace of the high priest and examined, the accusations against Him being that He claimed to be the Messiah and the Son of God. “Tell us whether thou be the Christ, the Son of God,” the high priest asks, and when Jesus says, “Thou hast said,” declares that His blasphemy has been proved and death is justified.

Jesus was taken before Pontius Pilate, the governor, who, believing that Jesus was innocent, tried to bring about His liberation. But his sense of justice was numbed by his fear of the Jews who, with increasing vehemence, reiterated their demand that He should be crucified. Their cry “If thou let this man go thou art not Cæsar’s friend” showed him plainly the danger of not yielding to them.

Jesus, carrying His Cross, was led with two robbers to Golgotha to be crucified. Over His Cross Pilate put the title “Jesus of Nazareth, the King of the Jews” in three languages. When He was dying the priests, the scribes and the robbers mocked Him, and the soldiers cast lots for His seamless robe.

“And behold,” says St. Matthew, “the veil of the temple was rent in twain from the top to the bottom; and the earth did quake, and the rocks rent.”

The Gospel narrative, however, does not end with the Crucifixion. On the third day Jesus rose again

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and for forty days remained on earth. Finally He was "taken up into Heaven," leaving His disciples to await the coming of the promised "Comforter" ten days later.

Not much is said in the Gospels of the events of the post-Resurrection forty days, though there is a fair amount of information given in the non-canonical gospels. The assumption is that Jesus spent the whole of that time in interpreting for the disciples' benefit the esoteric meaning of the doctrine which He had openly preached and in defence of which He had died.

### *MOHAMMED (Also Mahomed, Mahomet)*

We know Mohammed was born in Mecca about A.D. 570. It has been said that he was an orphan and spent his boyhood in the desert, either tending flocks or accompanying Meccan caravans. When he was 25 he married a rich widow, called Khadija, by whom he had several children.

Biographers say that while he was in seclusion during the month which Arabs give over to prayer and meditation he was visited by remarkable dreams and visions. "He called it revelation," says Carlyle. His revelation was that there was one God and Mohammed was His Prophet. He first discussed his mission with intimates, and the new religion for a time was shared by only a chosen few. The band of followers grew steadily in secret. Then Mohammed preached in public, and it seemed to his fellow-townsmen that he was aiming at a dictatorship. He was bitterly attacked. Some of the people of Medina looked favourably on his teaching and he fled to this

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city from Mecca, only just in time to escape being murdered.

The end of his life was marred by wars. He grew infuriated when men would not believe in him and persuaded his followers to make converts at the point of the sword. Thus he began his "Holy War," which was waged so successfully that he conquered nearly all Arabia.

The Koran is the Mohammedan Bible, and sets out the code of Islam (Mohammedanism). It contains the Prophet's revelations and is regarded by Mohammedans as inspired and uncreated. The devout Muslim does not touch it with unwashed hands. He believes that "There is no God but Allah and Mohammed is his Prophet." He must pray five times a day, with his face towards the East. During Ramadan, the ninth month of the Mohammedan year, he must fast rigidly. Not even the saliva must be swallowed deliberately during the hours of daylight. He must make the pilgrimage to Mecca at least once in his lifetime.

Mohammed did not claim that he was teaching a new religion. He borrowed a great deal from the Jewish faith. It was his purpose to show that man was not capable of working out his own salvation and to help him on his way God had sent to earth six prophets—Adam, Noah, Abraham, Moses, Jesus and himself. He honoured the name of Christ, believing that He worked miracles.

### EXERCISE

*State what is the cardinal point of each of the chief religions.*



### *Chapter III*

## SUPREME MOMENTS IN WORLD HISTORY

It is essential that you should know something about world history. You cannot see the history of your own country in true perspective until you have considered it in conjunction with the records of other countries' growth.

Certain events stand out with special prominence, appearing to the student of history as turning-points in the destinies of peoples, for good or for ill. When you have read about these events you should be eager to learn about the preceding and resulting course of circumstances, so that you may be able to read history as a continuous story into which all the threads of interest are neatly woven.

### *Marathon: The Battle of Salamis*

In the first chapter you learnt how modern Western civilisation has been built on the civilisation of Greece and now realise why so much importance is attached to a study of the ancient world. In the sixth century B.C. the Greeks were established all along the Mediterranean coasts. They had also settled along the coast of the Black Sea, in Italy and in Mediterranean islands. Their colonies in Asia

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Minor had become part of Persian territory and, fretting under the hand of the alien master, had revolted. Darius, the King of the Persians, who was ruling over the largest empire hitherto seen, looked upon the Greeks as dangerous rivals, and when the insurrection broke out he was determined to be revenged and set himself to subdue the Greeks in Europe. Accordingly in 490 B.C. he attacked the Athenians with a great host at Marathon on the coast of Attica. The Athenians, aware of the huge numbers that had been brought against them, sent a runner—who covered 150 miles in less than two days—to the Spartans, imploring them for help. The Spartans had hitherto been at enmity with the Greeks, but they willingly agreed to throw in their lot with them against the dangerous foe. Superstition prevented them from setting out to fight before the moon was full, and when at last they arrived they found the Greeks had driven the Persians home. Darius died and in 480 B.C. his son Xerxes took a mighty army across the Dardanelles. A small Spartan force made a heroic stand at Thermopylæ, being killed to a man. Athens was captured and burnt. The Greeks built a big fleet so that they could attack the enemy at sea, and utterly defeated the Persian fleet at Salamis. Greece was free of the invaders and Hellenic civilisation was saved. Pericles set out to rebuild the city, and the intellectual life of his people was able to go forward to its highest level.

### *The Peloponnesian War*

A long period of great splendour and prosperity

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followed the defeat of the Persians. It was broken in 431 B.C. by the Peloponnesian War, which was the result of rivalry between Athens, Sparta and other states. Pericles, who had done so much towards making Greece great, personally directed the Athenian fleet, which was more or less successful. For nearly twenty-eight years this war wasted the Greek nation. In 404 B.C. Athens was completely beaten, and for a generation the Spartans were the predominating power.

### *Collapse of the First World Empire*

Ravaged by internal wars Greece was not in a position to meet attacks from outside. When asked for help by her enemies Philip of Macedon readily took the opportunity to pounce down on Northern Greece, adding it to his possessions. In 338 B.C. the Greeks were routed by Philip's army at Chæronea. Having conquered Greece, Philip made plans to march into Asia against the Persians. Before he could achieve his ambition he was murdered, and his son Alexander completed the work he had started.

Alexander conquered the Thebans—who had taken the lead in Greece—and the Persians, overran Syria and Phœnicia and invaded Egypt and India. He died when planning to move on Arabia. After his death the mighty First World Empire, which he had created, collapsed, and was divided among various generals.

### *Growth of the Roman Empire*

A new power was now arising. To get a good grasp of the Roman civilisation it is necessary to go

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back a little. Rome was founded about 753 B.C., it is believed. A well-known Greek legend tells how the twin grandsons of Æneas, called Romulus and Remus, were saved from being drowned in the Tiber, and brought up by a she-wolf. Romulus built a city on the banks of the Tiber, calling it Rome after himself.

For many centuries the central part of Italy had been occupied by the Etruscans. About 510 B.C. the last Etruscan king was expelled from Rome, which from that time became a republic. Rome gradually extended her power. Then came a great horde of Gauls and Celts—barbarians who threatened to overwhelm her completely—in 390 B.C. The story of how the Romans were warned by the cackling of geese when the Capitol was about to be stormed is well known. The enemy eventually withdrew and Rome was able to put her house in order again. The Samnites and other tribes attacked her, and her successes against them helped to increase her power. For some time she was engaged in fighting the various Latin cities that were jealous of her power, but at length she overcame them and in 338 B.C. the Latin League was at an end. War with the Samnites and the Etruscans occupied her for the next fifty years, but as she added conquest to conquest she became more powerful. The Greek colonies sided with Rome, but Rome had offended the Greeks in Tarentum, and they sent to Pyrrhus, the famous Greek general, who was King of Epirus, for help. Twice he beat the Romans, but at Beneventum in 275 B.C. the Greek Alliance had to yield.

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### *The Punic Wars*

A grave threat came from the Carthaginians, Phœnician colonists who had built up a great city in Carthage on the North African coast. The Carthaginian Empire included most of the Mediterranean coast of Africa, the southern and eastern coasts of Spain, the islands in the western Mediterranean and most of Sicily. It was natural that there should be a clash between the two powers. The first of the Punic Wars (264-241 B.C.) was the beginning of the struggle for dominance following Rome's sending help to a Sicilian town which Carthage was punishing. Rome defeated the Carthaginian fleet at Mylæ in 260 B.C. Forty years later the Carthaginians took their opportunity for revenge and under Hannibal poured over the Italian Alps (218 B.C.) with elephants and horses, losing thousands of men on the journey. The remaining army defeated all Roman forces sent against it, but the Romans cut off Hannibal's communications and he was unable to obtain reinforcements and equipment with which to besiege Rome or establish himself permanently in conquered districts. After fifteen years of brilliant but fruitless campaigning Hannibal returned to Carthage.

Rome was saved at this critical period of her history by the skill of Scipio the Elder, the great Roman general, who beat Hannibal at the Battle of Zama in 202 B.C. Carthage had to bow to Rome's superior power, handing over all her overseas possessions.

In spite of her defeat Carthage continued to prosper, and her commercial greatness was resented by the Romans. Rome accordingly declared war

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on Carthage for a third time, hoping to defeat her utterly. When Carthagina refused the extortionate demands of the Romans, their general, Scipio the Younger, took the city after a strenuous defence and burnt it (146 B.C.), incorporating Carthaginian territory into a new Roman province, called Africa. Corinth, another great trading city that stood in the way of Roman development, was taken and utterly destroyed in the same year.

In the time of Augustus (63 B.C.-A.D. 14) the Roman Empire embraced nearly the whole of Europe. In Asia it stretched from Asia Minor to India, including Syria, Palestine, Arabia, Persia and many other countries. So great did the Empire become that Rome was found to be too remote from the Eastern provinces, and various subordinate capitals more conveniently placed were used for administrative purposes. Towards the end of the third century subordinate rulers were appointed to lighten the Emperor's burdens. Eventually Constantine the Great (306-337) changed the capital from Rome to Byzantium, henceforward called Constantinople.

Less than a century later, following the death of Theodosius, the Empire definitely split into two independent states each with its own ruler—the Eastern Empire with its capital at Constantinople, comprising Asia Minor, Egypt and what is now called the Balkans, and the Western Empire with its capital at Rome, comprising Italy and the whole of Western Europe.

### *Decline and Fall of Rome*

The Goths, a Teutonic tribe on the banks of the

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Danube, were harassed by the Huns from Asia and were allowed to settle on Roman territory out of their reach. The Romans took advantage of their dependence, and the Goths were obliged to take up arms against the Romans, whom they actually beat at Adrianople (A.D. 378). They chose as their king Alaric, who plundered the Northern cities of Italy. The Roman troops policing Britain were summoned back, but after long fighting, Rome, starving and plague-stricken, was captured and plundered by the barbarians (A.D. 410).

The Huns poured into Gaul under the lead of Attila, and on the banks of the Seine near Troyes (A.D. 451) faced the Romans and the Goths, now united. Attila was defeated and Europe saved from Tartar domination. The Huns ceased to be united when Attila died, but Rome had more troubles to face. A few years later the city was sacked by the Vandals, a Teutonic tribe. Odoacer, their king, dethroned the last Roman Emperor, and by 476 the Western Empire was at an end.

Interest now centres on the Franks, a Teutonic tribe, who attacked enfeebled Rome. Under King Clovis they conquered Gaul, calling it Francia. Charles Martel, called "The Hammer," united the Franks and saved his country from the hordes of Mohammedans fighting for the prophet Mohammed, who was making converts at the point of the sword. The Frankish infantry under Charles Martel made a wonderful stand near Poitiers (A.D. 732) against the Arabs. The Christian army beat the Mohammedans and so decided the future of Europe.

In A.D. 800 Charlemagne, King of the Franks,

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was crowned Emperor of the Great Roman Empire: as re-established by him it is known as the Second Empire of the West. Charlemagne's dominions consisted of Gaul, Italy, parts of Spain and Germany. Under his wise rule there was prosperity and contentment.

### *The Battle of Hastings*

When the Roman legions were withdrawn to attend to urgent matters at home Britain was left at the mercy of invaders. In the next chapter you will learn how the Danes or "Northmen" harassed the English, settled here in Alfred's time and were finally overcome. The "Northmen" had also planted themselves in France and eventually became known as the Normans. Under William, Duke of Normandy, who aimed at the English throne, they fought against Harold's army at the Battle of Hastings in 1066. Harold's axemen stubbornly resisted William's cavalry and archers until Harold fell dying. The Norman Conquest brought England back to Roman ideas which she had forgotten. William was ruthless in his warfare, but he did a great deal towards making England a great power in Europe.

### *The Crusades*

All the lands once included in the Egyptian Empire—Babylonia and Persia—were conquered by the Saracens, the name by which the Arabs were known. They swarmed along the coast of Northern Africa, into Spain and so to France. The Turks, converted to Mohammedanism, supported the



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Saracens and overran the Holy Land. Christians worshipping at the sacred spots in Jerusalem were treated with great cruelty, and about 1095 began the First Crusade to drive the Saracens out of the Holy Land. Peter the Hermit, a French monk, appealed to Christians in Europe to take up arms. The Normans responded readily, and the first Crusade was the means of setting up a Christian king in Jerusalem. Forty-five years later the Moslems won back part of the land and a second Crusade failed to oust the infidel. Then in 1187 Saladin, ruler of Egypt, captured Jerusalem, and Richard I of England and Philip II of France set out to avenge the wrong. Unfortunately quarrels broke out and Richard had to leave Saladin in possession. The Fourth Crusade was undertaken in 1202, but the Christian Army was diverted from its objective and began to make war on the Eastern Empire, conquering and sacking Constantinople, which two hundred and fifty years later passed into the possession of the Turks.

### *The Diet of Worms*

During the reign of Edward III (1327-1377) John Wycliffe, a learned don, set about reforming the Church. His teaching spread all over Europe. Martin Luther in Germany, Erasmus in Holland, Calvin in France, Huss in Bohemia and Zwingli in Switzerland all took part in bringing about the great change known as the Reformation. Charles V was Emperor of Germany and he ordered Luther, who had defied the Pope, to appear before a council, or Diet, at Worms on the Rhine. Luther was asked

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if he would withdraw his writings and refused. The Emperor ordered him to be banished.

### *The Spanish Armada*

In the sixteenth century we find Spain, the most powerful nation in Europe, ruling over Italy, Sicily, the Netherlands, America and other lands.

Philip of Spain, who had done his utmost to persuade Elizabeth to keep England Catholic and failed, directed his energies towards stamping out Protestantism in Belgium and Holland. The Dutch had repeatedly asked for help from Elizabeth against the oppressor, and her championing of these Protestants infuriated Philip. Spain also resented England's efforts to capture trade with America and killed some of the merchants who dared to approach Spanish territory there. In 1588 the clash came. Up the channel swept Philip's 132 ships under the Duke of Medina Sidonia. The English had 197 vessels, which were much smaller than those used by the Spanish and carried only half the number of men. But the English tactics—their use of ships covered with pitch, set on fire and sent adrift—and a favouring wind worked havoc among the Spanish fleet, which fled in helpless confusion. Only about one-third of the original number arrived home. So England was left in command of the seas.

### *Discovery of the New World*

Between 1400 and 1600 remarkable discoveries were made by adventurers which were to give mankind a completely new vision of the world. The great desire became to find India by sea. In 1486,

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Diaz, a Portuguese, rounded the Cape of Good Hope, but India was not reached until Vasco da Gama's expedition ten years later. Meanwhile Columbus, an Italian, offered to go exploring for Portugal, and when his services were refused turned to Spain. Ferdinand and Isabella equipped him and out he set in 1492. When he sighted land he thought he had reached India from the West, but in reality he had arrived at America. Other explorers in the service of Spain and of Portugal added to Columbus' discoveries, and the newly found land was parcelled out by the Pope between the two European countries, Portugal taking what was known of Asia and Africa (the West African coast had been explored by a Portuguese prince, Henry the Navigator, who had established a trade in gold dust and ivory) and the eastern corner of South America (part of what is now called Brazil), and Spain taking the rest of the New World. Sir Humphrey Gilbert in Elizabeth's reign turned his thoughts to colonisation in America. Sir Walter Raleigh carried on his work and tried without success to form the colony of Virginia, and later he voyaged to Guiana. Henry Hudson, who was in the service of the Dutch East India Company, succeeded in discovering the Hudson River, the Hudson Strait and the Hudson Bay. In 1620 forty-one emigrants—who were later to be called the Pilgrim Fathers—set sail in the *Mayflower*, which was ill-fitted to battle against the great waves of the Atlantic. In sixty-four days they reached America. Years of hardship followed, but gradually conditions improved and more emigrants joined them and so Massachusetts and other states were

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founded. Later—in the reign of Charles II—the Quakers, under William Penn, set sail for America to escape persecution. The part of the country in which they settled is known today as Pennsylvania.

### *The Thirty Years' War, 1618-1648*

The opening of the seventeenth century found Protestantism in an uneasy state. In Germany the Protestants were threatened by the Catholics, who were trying to recover the ground they had lost by the Reformation. The Emperor was Catholic, and it seemed that he might make conditions very unpleasant for Protestants. A Protestant Union was formed in 1608 under Frederick, a German Prince ruling the Palatinate. The Catholics at once formed the Catholic League to oppose it. Eventually civil war broke out and Germany was drained for thirty years. The Protestant cause went from bad to worse until Gustavus Adolphus, King of Sweden, came to their aid. After further years of fighting, arising from political as well as religious causes, the vigorous initiative of France, urged by Richelieu, brought the war to an end. The Holy Roman Empire was broken up and Alsace was annexed by France.

### *The American War of Independence*

Towards the end of the eighteenth century nearly all North American territory in which Europeans had settled was under British rule. The British colonies south of Maine were of a miscellaneous character—French, Dutch and Swedish as well as British. The colonies grew restive under British domination, and legislation in favour of the East

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India Company, which hit the American shippers, brought the trouble to a head. Cargoes were thrown overboard in Boston harbour in 1773, and fighting broke out two years later when the British tried to arrest two of the American leaders. The American War began, and in 1776 the Congress of the insurgent states issued the Declaration of Independence. George Washington was Commander-in-Chief. General Burgoyne, the British general, was defeated at Saratoga in 1777 and an army under General Cornwallis was forced to capitulate in 1781. Peace was made in 1783 in Paris, and thirteen colonies became a union of independent states.

### *France Becomes a Republic*

In 1781, when Louis XVI was on the throne, France was nearly bankrupt after long wars and wasteful expenditure. The peasantry, crushed by taxation, were provoked to grave discontent by the luxurious living of the aristocracy. Louis, hoping for a solution of the problems which faced the country, summoned the States-General—which had not met since Richelieu's day—so that the Third Estate (the Commons) could confer with the nobles. The Commons took a firm stand and the States-General gave place to a National Assembly. From that moment the power of the monarchy was broken. The National Assembly abolished taxation, insurrection swept through the country to the refrain of "Liberty, Equality and Fraternity," and the Bastille, the great prison in Paris, was stormed and burnt in 1789. The nobles who had not fled from the country were imprisoned and guillotined, and

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in 1792 France was declared a republic. The King and Queen tried to escape from France but were brought back and executed.

### *Napoleon Challenges the World*

At the beginning of the nineteenth century all eyes were fixed on France. In 1804 Napoleon Bonaparte, who had liquidated (to use a modern term) the Revolution, was crowned Emperor and proceeded steadily to carry out his plan of world dominance. He recognised that England was his most dangerous enemy and prepared to invade her, massing a great army at Boulogne for the purpose. Obviously before this army could be got across the English navy must be enticed away from the Channel. The French Admiral Villeneuve sailed across the Atlantic with Nelson after him, and Nelson beat him soundly at the Battle of Trafalgar (1805). Nelson was killed, but he ruined Napoleon's plan of invasion, and the Emperor abandoned this part of his programme of conquest.

In 1807 Napoleon's conquests had extended up to the frontier of Russia. Five years later he invaded Russia and the bulk of his gigantic army was frozen to death in the snow. Germany and Austria attacked what remained, and in 1814 Napoleon was forced to abdicate. He retired to Elba, but after a brief space landed in France again, gathered up an army and set about attacking Belgium, where the Duke of Wellington and Marshal Blücher were prepared for him, and defeated him on June 18th, 1815, at Waterloo, putting an end to Napoleon's bid for world power.

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### *Civil War in America*

The growth of the United States is one of the most interesting chapters in history. Gradually her territory and wealth had increased, and with this process of development had come the question whether negro slavery should continue. When Texas, which was originally part of Mexico, was admitted to the Union, trouble boiled over, for the South wanted to make slaves and the North did not. The Southern States declared themselves a separate nation outside the Union, and Abraham Lincoln, the leader of the North, was confronted with civil war. After four years' struggle (1861-65) the anti-slave states in the North wore down the armies of the South. Before Lincoln was killed by an assassin's bullet he had the satisfaction of seeing slavery abolished and the Union triumphant.

### *The Franco-German War*

The long-threatened conflict between France and Prussia, which were both striving for predominance in Europe, broke out in 1870. Prussia had been preparing for war for some time, but France was crippled with financial troubles. In August of that year the Germans poured into France, and a French army under the Emperor capitulated at Sedan the next month, another surrendered at Metz, and Paris was taken by the Prussians in 1871 after a siege. By the Peace signed at Frankfort Alsace and Lorraine were handed over to the Germans.

### *The Rise of Japan*

Until the middle of the nineteenth century, Japan, an off-shoot of the ancient Chinese civilisa-

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tion, was a backward and isolated country dominated by mediæval traditions. Missionaries had converted many Japanese to Christianity in the sixteenth century (following on the great period of Portuguese and Spanish voyages of exploration), but the political aims of the Catholic powers caused Japan to suppress the western religion early in the following century, and to cut off all relations with the outer world. Then, in the nineteenth century, after a clash with the U.S.A., Japan was forced at gun point to open her ports to trade. This contact with civilised nations (the U.S.A., Britain, Russia, France and Holland) completely changed the Japanese outlook. Mediæval Japan set out to become a modern country of the Western type, and by the end of the century the transformation (one of the most remarkable events in world history) was accomplished.

The new Japan was soon faced with international problems. The chief European powers were busily empire-building in the Far East. Russia, in particular, needed a more convenient outlet at the eastern end of her vast Asiatic empire, for Vladivostock, the southernmost Siberian port, was hemmed in by Japanese territory. Accordingly Russia pressed southwards through Manchuria to the Yellow Sea and so precipitated war with Japan (1904-5). The poorly organised Russian forces were soundly defeated by the Westernised Japanese armies. The Russian Baltic Fleet, which had plodded round the world to Japanese waters, was wiped out by the Westernised Japanese Fleet. At one stride Japan took her place among the Great Powers, as the dominating nation of the Far East.



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### *The Great War*

The long spell of peace in Europe during the latter part of the nineteenth century and the development of international trade had made people think that general war between European nations was an impossibility. Germany, Austria and Italy were allies, so were France and Russia.

Germany needed to expand. She was not rich in colonies and she dreamed of a great empire that would stretch east and west. Austria, which had agreed to stand by Germany, ruled over various nationalities: Serbia wanted to unite these peoples in one nation. In 1903 Austria annexed the Slav states of Bosnia and Herzegovina, much to Serbia's resentment. The heir to the Austrian throne was murdered in 1914 while on a visit to Sarajevo, the area of discontent, and Austria used the incident as a reason for crushing Serbia.

Behind Austria stood Wilhelm II, the German Kaiser and his war lords. For one week of acute anxiety England stood back hoping that war could be avoided. Russia was going to stand by Serbia. France had determined to stand by her ally Russia. Germany, in defiance of a solemn treaty, crossed the Belgian frontier to attack France. Britain could no longer stand apart. The Germans were well prepared and soon swept through Belgium's defences. At the River Marne they were checked in their advance on Paris and the Channel ports, and then began the wearying trench-fighting in which little progress was made for some time. Turkey joined the Central Powers, and in 1915 Italy came into the war against Austria and a year later against Germany.

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The British eventually conquered the Turkish possessions in Asia, but after a terrible struggle in which Australian and New Zealand troops took part were obliged to evacuate the Gallipoli Peninsula.

From the middle of 1916 onwards the Allies made some headway (tanks were first used in September of that year), but a desperate push by Germany in 1918 (aided by troops from the Russian front, for Russia had made peace) brought the Germans again to the Marne and led to the appointment of Marshal Foch to the supreme command of the Allied forces. Germany, however, was spent, and the Summer of 1918 saw a steady advance of the Allies aided by armies from the U.S.A. (the U.S. declared war on Germany in 1917, as a result of Germany's unrestricted submarine warfare). The German armies were thrust back to the French frontier; the Austrian armies were routed by the Italians. On November 4th Austria capitulated; on the 7th the German fleet mutinied; a revolution in Berlin and other German towns followed; the Kaiser fled to Holland, and on the 11th an Armistice was signed.

During the Peace Conference that followed, the League of Nations was established "to promote international co-operation and to achieve international peace and security by the acceptance of obligations not to resort to war." The Peace Treaty was signed at Versailles on June 29th, 1919. The chief results of the war were Germany's surrender of the whole of her overseas empire, the re-drawing of the map of Europe with the rise of several independent states (including Poland, Hungary, Czecho-

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Slovakia and Jugo-Slavia), and the establishment of the Union of Soviet Republics in the former Russian Empire and of a republic in Germany.

### *The Russian Revolutions*

The main causes that led to the Russian revolutions are to be found in Russia's past. Even before the war it was clear that sooner or later big social and political changes were bound to occur in Russia. The immediate cause was the mismanagement of military and civil affairs during the first two years of the World War. Early in 1917 an insurrection broke out in Petrograd (which is now known as Leningrad); the Tsar abdicated on March 15th, and a republican government under the "moderate" leader Kerensky endeavoured to carry on war. The Russian people, however, were anxious for peace, and nine months later the defeated and war-weary Russian armies mutinied, and political power was seized by the Bolsheviks (the political party demanding the maximum number of reforms) under Lenin. The disorders attending the second revolution were ruthlessly suppressed by the Soviet Government, but the new Russia had to face a period of invasions and of internal strife and famine before some semblance of order came out of the chaos.

### EXERCISES

*Write an essay showing how the discovery of new countries beyond the seas affected the outlook of Europe in the sixteenth century.*

*Make a list of six turning-points in world history and state briefly the results of each.*

## *Chapter IV*

### THE STORY OF THE BRITISH PEOPLES

SOME historians will tell you that English history begins where the first Celtic settlers established themselves in the country, but really our beginnings are to be found much farther back, for the history of a country begins with the first signs of life—at the first point which investigation can reach. If we trace back hundreds of thousands of years we find that Britain was once part of Western Europe. She became an island at some unknown date when the sea swept in at the Straits of Dover.

The first men lived by fishing and hunting. Knowing nothing about metals, they carried weapons of flint chipped into shape, and dwelt in caves. (The Old Stone Age.) The climate grew colder and there followed a long period of ice. After the great Ice Age the country was repopled by a second race of men using implements of polished stone. They were Iberians, small-limbed, swarthy, dark-haired, long-headed people—a type still found in the West of Ireland, Wales and the Highlands. They grew corn and made pottery. (The New Stone Age.)

Next, after a long interval, came the Celts, large-limbed, fair-haired, broad-headed people of the Aryan Family. The first Celts were of the Gadhelic

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("Gaelic") type and used bronze implements. (The Bronze Age.) They were the ancestors of the Irish, the Highlanders and the Manx, and they were driven from England by another inrush of Celts—the Brythonic Celts, ancestors of the Britons. These people knew how to make implements of iron. (The Iron Age.) From them the modern Welsh, Cornishmen and Bretons are descended.

### *The Roman Conquest*

In 55 and 54 B.C. Julius Cæsar made two raids on our shores, but nearly a hundred years passed before the Romans attempted in earnest to conquer Britain.

In A.D. 43 Aulus Plautius (despatched by the Emperor Claudius) landed in Britain and, except for the long resistance of the Western Britons under Caractacus, made an easy conquest. The harshness of the conquerors brought about a formidable revolt some twenty years later of the tribes of central and Eastern Britain under the leadership of Boadicea, the woman chief of a tribe called the Iceni. Many Roman towns were captured, but eventually the Romans (under Suetonius) gained a decisive victory near London, and Boadicea, it is said, committed suicide.

Under the governor Julius Agricola (A.D. 78-84), who completed the Roman conquest, the British learnt to appreciate the advantages of Roman rule. Early in the second century the Emperor Hadrian built the famous wall, seventy-three miles long, from the Tyne to the Solway as a defence against the Picts, who lived to the north. Another Roman defence, an earthen rampart, ran between the Forth

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and the Clyde. This marked the extreme northerly limit of the Roman Empire.

For about 300 years Rome governed South Britain, teaching the people to build roads, houses and temples and developing agriculture and mining. With the collapse of the Roman Empire this peaceful state of affairs came to an end. A welter of wars broke out. Picts from the North, the Scots from Ireland and the Saxons from Germany and Denmark harassed the Britons as soon as they were left without the protection of the Roman legions. We have only the vaguest knowledge of what happened during the two hundred years that followed the end of the Roman Empire.

### *The Dark Ages*

The Angles and the Saxons were heathens and did their best to stamp out the signs of Christianity that they found in the island. The civilisation of Rome slipped away, and a dark period followed until Christianity again gained a foothold. Augustine landed in Thanet in 597 and became the first Archbishop of Canterbury. From Augustine's time to Egbert's reign there was a series of conflicts between the Kings of Kent, Northumbria, Mercia and Wessex—the main kingdoms into which England was then divided. Egbert of Wessex (802-39) became overlord of all England. He has been described as the first king of England. Danish invaders were a cause of acute anxiety to him and to the kings, including Alfred, who succeeded him. Alfred made a treaty with them, confining them to a district of the island which became known as the "Danelaw"

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—roughly the land north and east of Watling Street, the road from London to Chester. Under Alfred's successors the Danelaw was reconquered.

Alfred (871-900) was a great king. He did his utmost to restore the civilisation which the Danes had smashed and to improve the learning of his people by translating the best Latin books and giving encouragement to scholars.

The Danes under Canute again overran England in the time of Ethelred the Unready (979-1016) and remained in possession for twenty years. (Canute ruled over England, Denmark and Norway.) At the end of this time Ethelred's son Edward—known as Edward the Confessor—who had been exiled in Normandy, was called to the throne and ruled from 1042 to 1066. Edward had no children, and on his death Harold (the son of Godwin, Earl of Wessex) seized the crown. Duke William of Normandy also wanted it and in 1066 landed in Sussex, utterly defeating Harold at the Battle of Hastings.

### *England Under Norman Rule*

It was not an easy matter for William the Conqueror (1066-87) to master England, but gradually and painfully he established law and order. Under Norman rule England entered on a completely new phase. Feudalism, which had come into existence in Anglo-Saxon times, was now clearly defined. The land was divided into feuds, held on condition that the tenants supported their overlords in war time. William insisted that the tenants should take an oath of allegiance to the king and so protected himself against the power of the feudal nobles.

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William II (1087-1100), surnamed "Rufus," was extravagant, overbearing and cruel, but a courageous soldier. He was shot, by accident or design, in the New Forest. His brother Henry (1100-35) seized the crown and restored order, which Rufus had undermined. On his death both Matilda, his daughter, and Stephen of Blois claimed the throne, and soon after Stephen was crowned civil war broke out. Stephen (1135-54) was a weak and unsatisfactory ruler, and the records of his time contain terrible stories of the sufferings of the common people.

Matilda's son, Henry II (1154-89), strengthened the government and generally proved that he was a great king. He initiated "the rule of law." We have to thank him for a system of law which is the basis of administrative justice today. The brutal murder of Becket, Archbishop of Canterbury, who had supported the Pope against Henry's dictates, was a blot on his reign. Faced with a rebellion of the barons, Henry was publicly scourged at Canterbury, a spectacular act which helped him to triumph over his enemies. His son Richard I (1189-99) had none of Henry's greatness, but he is remembered for his brilliant military adventures, especially his Crusade to Palestine, for which his subjects paid by oppressive taxation.

John, Richard's brother (1199-1216), was a tyrant and provoked the people until the barons forced him to sign the Magna Charta (1215), which stood for law and curbed his capriciousness and lawlessness. His tyrannical rule over his tenants in France brought him into conflict with Philip



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Augustus, the French king, the result being that most of John's French dominions were taken from him.

John's heir was Henry III (1216-72), whose extravagance and unreliability brought him into conflict with his barons. Simon de Montfort headed a rebellion, and after defeating the King at Lewes took over government in the King's name. He stands out in history for having laid the foundation of Parliament. Henry's son Edward made war on Simon, defeating and killing him at Evesham, and ascended the throne as Edward I (1272-1307) unmolested.

### *The Later Middle Ages*

Edward was a great ruler and a remarkable contrast to his father. It was his ambition to unite Wales and Scotland to England. He was successful in his campaign against the Welsh. His son, like the eldest son of all the kings that followed him, was given the title of Prince of Wales. But he failed to subdue the Scots, in whose resistance Robert Bruce and William Wallace played such notable parts. Edward drew up wise laws and shaped the Parliament which Simon de Montfort had initiated. In 1295 he assembled what is now recognised as the first fully developed Parliament comprising churchmen, nobles, judges and representatives of the counties, cities and boroughs. England was now prosperous, being the largest grower of wool in the world. A big trade had been established with Flanders, where the wool was woven into cloth.

The campaign against the Scots was abandoned

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by Edward II (1307-27) who was idle, thriftless, heartless and obstinate. The governing of his country had no interest for him. He married Isabella of France, who (inspired by the exiled Roger Mortimer in Paris) headed a rising in 1327 and set up their son, then only thirteen years of age, as king. Edward was thrown into prison and murdered.

The reins of government were taken over by Queen Isabella and Mortimer, of whom she was enamoured, until the young King (Edward III, 1327-77) put an end to the misrule by seizing Mortimer, who was tried and executed.

### *The Hundred Years' War*

Edward III was a popular king. He induced the Flemings to settle in England so that the English might learn to weave wool into cloth. In his reign began the Hundred Years' War. Trouble with France had been steadily brewing for some time. Philip VI, the French king, had been supporting the Scottish whom Edward had tried to conquer when he came to the throne, and Philip coveted our possessions in France. Edward intensified the struggle by laying claim to the throne of France, basing his claim on the fact that his mother was the daughter of Philip IV of France. Edward won the battle of Crecy (1346) and captured Calais, which the English held for 200 years, but the glory of these achievements was blurred by the Black Death, which struck down half the population.

The battle of Poitiers (1356) was another big stroke of success for Edward against the French, but towards the end of his reign the tide turned and only

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Bayonne, Bordeaux and Calais were retained by the English.

The famous Peasants' Revolt (1381) headed by Wat Tyler took place in the reign of Richard II (1377-99), owing to the discontent caused by low wages, high taxation and oppression. Richard was accused of trying to get too much power and was deposed by his cousin, Henry of Lancaster, who ruled as Henry IV (1399-1413) without adding to England's greatness. But conditions for the people were improving. The woollen trade was expanding and prosperity was increasing. Henry V (1413-22) renewed the war with France, which was then passing through a period of anarchy. Her king, Charles VI, was mad and the nobles were at one another's throats. Henry won the battle of Agincourt (1415) against tremendous odds. He conquered Normandy and by the Treaty of Troyes was recognised as the future sovereign of France. Death prevented him from conquering all France. The success of the English numbed the French till, in the reign of Henry VI (1422-61), Joan of Arc, inspired by visions, put heart into the soldiery and turned our great victories into great defeats. The Hundred Years' War was at an end, and nothing remained to us but Calais and the Channel Islands.

### *The Wars of the Roses*

Civil war—the war between the House of Lancaster and the House of York, known as the War of the Roses—broke out while Henry VI was on the throne. After the Yorkists had defeated the Lancastrians in several battles (notably St. Albans

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and Northampton), Henry's cousin, Richard, Duke of York, laid claim to the throne. Richard had previously acted as Lord Protector during Henry's periods of madness. At the battle of Wakefield (a Lancastrian victory) Richard was killed, but his son Edward, after defeating the Lancastrians, set up as King, ruling as Edward IV (1461-83).

Edward, who gave himself up to luxurious living, quarrelled with his best friend, the Earl of Warwick, in whose hands he left the affairs of state. Warwick deposed Edward and put Henry VI back on the throne. Edward defeated and slew Warwick at the battle of Barnet, murdered Henry and made war on France. His brother Richard seized the crown on his death and murdered Edward's two sons (one of whom had reigned nominally as Edward V for three months), reigning for two years (1483-85). He was killed at Bosworth Field in battle against Henry, Duke of Richmond, who had been invited to come over from France to rid the people of a tyrant.

### *The Tudor Period*

Henry VII, the first Tudor, restored strong government, setting up the famous Star Chamber. He built many ships, carefully fostered trade and avoided wars. The new learning, based on Greek culture, which we call the Renaissance, took a firm hold during his peaceful reign. He died in 1509 and was succeeded by his son Henry VIII, one of the most remarkable figures in history.

England occupied an important position in European affairs (largely owing to Wolsey's foreign policy) while Henry VIII was on the throne.

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Printing was putting knowledge within the reach of all who desired it. The new learning had opened men's eyes to a completely different world of ideas, and eminent scholars from Europe came at Wolsey's invitation to teach students who were eager to master Greek letters. Henry was only eighteen when he began to reign, and at first affairs of state seemed to have little attraction for him. He allowed Wolsey to acquire more and more power, but eventually dismissed him from office, blaming him for his failure to obtain sanction from the Pope for Henry's divorce from Katherine of Aragon. Wolsey died disgraced and broken-hearted.

Henry's matrimonial crises are unique in history, and reveal the force of his tyranny and trickery. When the Pope refused him a divorce Henry called on Parliament to make new laws against the Church. Henry's reforms had nothing to do with religious doctrine: in fact, he had earned for himself the title of "Defender of the Faith" by writing a book denouncing Martin Luther, a German monk who was attacking the "sale of pardons"; he did not desire a change of doctrine but the Church's complete independence of foreign influence. He dissolved the monasteries, confiscating rich properties for the Crown and for his favourites, a ruthless campaign which caused the insurrection known as "The Pilgrimage of Grace" in 1536. Henry had sown the seeds of the Reformation and was powerless to stop their growth.

When the boy-king, Edward VI (1547-53), came to the throne there was a scramble for power among the nobles who had been enriched by the confisca-

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tion of land. Edward Seymour was the Regent, but he had to give place to Dudley, Duke of Northumberland, who put foreign Protestants in important positions and brought foreign troops into his body-guard. He forced the dying Edward to will the throne to Lady Jane Grey, Dudley's sister, who was proclaimed Queen after Edward's death. Jane was thrown into the Tower after reigning only ten days and was executed a few months later.

During her reign of five years Mary Tudor, daughter of Katherine of Aragon, restored Papal authority, put the leaders of the Protestant Church into prison and burnt hundreds of men and women at the stake. The Protestant bishops Cranmer, Ridley, Latimer and Hooper were among those who died for their faith. Mary's marriage with Philip of Spain had been very unpopular, and hatred of Spain was intensified when Philip brought England into the war against France which resulted in our losing Calais.

When Elizabeth, the daughter of Anne Boleyn and Henry VIII, ascended the throne in 1558 the country was nearly bankrupt, but under her wise guidance industry greatly improved. Literature, to which she gave every encouragement, reached an unprecedented level of beauty. She was a woman of extraordinary character—learned, a keen patriot, vain, forceful and able to inspire the devotion of her people. Elizabeth established Protestantism in England, and laws were passed making her the "Supreme Governor of the English Church."

A wonderful spirit of adventure was born in Elizabeth's time. Drake made his voyage round the

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world and Hawkins, Raleigh and many other brave Englishmen set out across the seas in search of new trade. Philip of Spain, afraid of England's growing power, sent his Armada into the Channel; it was defeated and England became a dominant naval power, a factor that helped our commerce and colonisation.

### *The Stuart Period*

The son of Mary, Queen of Scots, James I (1603-25), believed firmly in the divine right of kings and so did his son, Charles I (1625-49). Charles quarrelled with Parliament and with his subjects in Scotland. His demands for money and unjust taxation brought to a head the discontent that ended in the Civil War. Cromwell, a Huntingdonshire squire, was general of the Roundheads opposing Charles's Cavaliers, and after the execution of Charles became Lord Protector of England, Scotland and Ireland. Cromwell succeeded in restoring the prestige of England in the eyes of the world and made her once more the first naval power.

The power of Parliament was restored in the time of Charles II (1660-85) who, in spite of his excesses in private life, managed to be popular with his people. The foundations of our Colonial Empire were laid in his reign. In 1620 the Pilgrim Fathers emigrated to North America, where they founded a small state. Charles twice fought the Dutch, who relinquished to us their colony in America. We also had possessions in the West Indies, and trading stations in Hudson Bay, on the West Coast of Africa and in various parts of India.

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James II (1685-88), brother of Charles II, has been described as "a crowned mule." He was determined to put the Catholics into power. When a son was born to him, the leaders of the State decided to approach Prince William of Orange, who had married James's Protestant daughter, Mary, asking him to deliver England from the Papist king. James was not prepared for William's arrival and decamped to France, so that William was able to enter London undisturbed. William (1689-1702) and Mary became joint rulers, Mary dying in 1694. James died in 1701 in exile.

William and Mary had no children, so Mary's sister Anne (1702-14) became queen. Anne was good, kindly and stupid, and left her ministers to rule the country. The question of succession was a weighty one. Choice had to be made between the son of James II, a weak creature, a Romanist and a friend of the French, and George, a German, the direct descendant of James I and heir by act of Parliament.

### *England under the Hanoverians*

George I (1714-27) was not popular, but his reign was uneventful. His son, George II (1727-60), cared no more for England than his father had done. The outstanding figure of the age was Sir Robert Walpole, who was Prime Minister for twenty-one years, probably the most peaceful in our history. While he was in office trade increased enormously. Slackness, however, had fallen on the clergy and society, producing conditions which John Wesley, the evangelist, set out to rectify. He rode up and



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down England, preaching his vigorous sermons, establishing Methodism, and, some historians say, stirring up a spirit that prevented the dangerous ideas that were let loose during the French Revolution from taking hold in this country.

Walpole's latter days were disturbed by wars with Spain and France. Pitt, Earl of Chatham, succeeded him and proved himself a great statesman. In 1756 England was plunged into the Seven Years' War against France and Austria, from which Pitt emerged with flying colours. He set about defeating the French in North America, General Wolfe took Quebec and in 1760 Canada was ours.

George II died in the year of Wolfe's victory and his grandson, George III, became king (1760-1820). Pitt resigned from office because the new king and his ministers would not agree to Pitt's proposal to make war on the Spaniards, who were helping the French. Spain declared war on us in 1762 and we took from her Havana and Manilla, which we gave back under the Treaty of Paris. George III, a determined, earnest person, set himself to get free from the power of the Whigs, which was overshadowing that of the crown, and to build up a Royal party.

Our American colonies were anxious to throw off our control and in 1775 we went to war with them, a hopeless undertaking because of the great distance between England and America and because we had no great general. George Washington was in command of the American troops and soon the French were supporting them. The independence of America was established by a Treaty signed in 1783.

A time of prosperity followed the peace made with

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America. Clive and Warren Hastings had done great things in India. The Industrial Revolution whereby England changed from a farming country to a manufacturing country was being accomplished. Watt's steam engine and the invention of spinning machinery and the power loom were making a great difference to commerce.

During the ministry of Pitt the younger, the brilliant son of the Earl of Chatham, France was doing her best to dominate the world. The French Revolution had pulled down royalty and aristocratic society and a republic had been set up. Those who were enjoying the "new liberty" were ready to ally themselves to the discontents of other countries. The Napoleonic Wars tested our endurance to the utmost. 1805 was a very critical year. Napoleon was at Boulogne waiting to attack us until Nelson upset his plans by defeating the French Admiral, Villeneuve, at Trafalgar. Wellington ended the great struggle with France when he won the Battle of Waterloo, 1815.

George III died insane and was succeeded by his eldest son, George IV (1820-30), who had acted as Regent during the last ten years of his father's reign. George, a weak and unpopular king, was followed by his brother William IV (1830-37). No special capacity was shown by William, but he did nothing to make himself unpopular.

Victoria, William's niece, was only eighteen when she was crowned in 1837. The early part of her reign, which lasted for sixty-three years, was a time of difficulty for the country. The Corn Laws and the Chartist agitation created problems which were

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a grave menace to internal peace. The Crimean War, the Indian Mutiny and the Boer War were all fought during her reign.

### *Parliamentary Reform*

The period 1815-1911 was marked by important Parliamentary changes. The long-wished-for reform in the House of Commons was achieved in William IV's reign, when the great Reform Bill (1832) was passed. This measure disfranchised the rotten boroughs—places with less than 2,000 inhabitants—and distributed the seats among growing towns. The second Reform Bill (1867) and the third Reform Bill (1885) extended the vote to the poorer classes, ensuring, as a modern historian has put it, "a democracy of adult males." Between the years 1829-53 Dissenters, Catholics and Jews, hitherto banned owing to their religious beliefs, were admitted to Parliament.

Notable reforms took place in criminal law in spite of the obstruction of the Tory minister, Lord Eldon, who saw danger in all reform. Until 1818 more than 160 crimes were punishable with death, and men were hanged for the most trivial thefts. Most important of all reforms was the setting up of State-supported schools in 1870.

The Victorian era was a period of increasing material prosperity; a period marked towards its close by a growing sense of social responsibility among the administrative classes; a period illuminated by great scientific, philosophical and literary achievements—Darwin, Herbert Spencer, Huxley, Lister, Dickens, Ruskin, Meredith, Tennyson and

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Browning are a few of the outstanding names in these fields.

The reign of Edward VII (1901-10) was essentially a time of national and Imperial consolidation. The enlightened settlement of the difficulties in South Africa that produced the Boer War (1899-1902) was an auspicious beginning. There was peace and steady material progress during the rest of Edward's reign, and most historians agree in praising his careful foreign policy. The king and his ministers managed to keep Europe in equilibrium at a time when the great European nations were affected powerfully by the economic and political forces that thrust them eventually into the World War of 1914.

### EXERCISES

*After reading a full account of conditions in England following the Napoleonic Wars write a short essay drawing a parallel between that period and the period following the World War.*

*Write a short account of the activities of English explorers during the Elizabethan period.*

*Select the three rulers of England before the twentieth century whom you consider to have made the most valuable contributions to the welfare of England, and give your reasons.*

## Chapter V

### THE MASTER MINDS OF LITERATURE

THE first literary expression of all nations was in the form of poetry. At the head of Greek literature stand the Homeric poems, the *Iliad* and the *Odyssey*, which have never been surpassed in beauty and interest. In their present form they date from 800 B.C. Who Homer was and how the poems were created are points that cannot be determined with certainty and are of really no importance. We are content that these writings of his have been preserved and have lost very little of their greatness in being translated for the benefit of those who are unable to read Greek.

The *Iliad* is the story of the Trojan war and the *Odyssey* describes the adventures of Ulysses when returning from the Siege of Troy. This semi-legendary undertaking of the Greeks stirred the imaginations of many poets. It inspired Virgil, the greatest of the Roman epic poets, to write the *Aeneid*, which tells the story of the wanderings of Aeneas after Troy had been destroyed.

Greek literary culture was at its highest during the period when Pericles (490-429 B.C.) ruled Athens. The age of Pericles has been described as

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"The Milky Way of great men." Contemporary with him were Æschylus, the father of Greek tragic drama; Euripides, the foremost of Greek tragic poets; Sophocles, the famous Athenian dramatist who wrote *Œdipus*; Herodotus, the father of history; Pindar, the author of famous odes; and the lyric poet Simonides, whom Wordsworth called "the noblest poet that can be." About the time of Pericles' death flourished Xenophon, the Athenian general and historian and essayist; Aristophanes, the greatest of Greek comic poets; Plato, the celebrated philosopher, whose *Republic* and *Dialogues* rank among the foremost literary achievements of the ancient Greeks, and Thucydides, the historian.

The philosopher Aristotle (384-322 B.C.), a pupil of Plato, marks the end of the great days of Greek literature. For nearly two thousand years his writings dominated the thought of European scholars.

The chief later Greek writers are Polybius, the historian; Plutarch (A.D. 46-120), the biographer of famous Greeks and Romans (North's translation of Plutarch's *Lives* should be read); Lucian, who wrote humorous dialogues in the second century, and Theocritus, a poet of the third century, famous for his Idylls. A collection of 4,000 poems called the Greek Anthology was made at Constantinople during the Middle Ages: its contents cover the period between 700 B.C. and A.D. 1000, and they are remarkably uniform in style and excellence. The selection of these poems translated by Mackail makes delightful reading.

A notable literary achievement of the third

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century before Christ was the translation into Greek of the Old Testament. This version, which was undertaken by seventy learned men, is known as the Septuagint.

### *Latin Literature*

Latin literature was based on Greek models. The chief early writers are Plautus (died 184 B.C.) and Terence (died about 159 B.C.), both of whom produced witty comedies, and Cato (died 149 B.C.), whose prose is marked by its humour and terseness. In the first century before Christ are three great prose writers—Cicero, the philosopher and orator, who established the classical Latin prose style, Julius Cæsar, whose military reports are written in clear, vigorous language, and Sallust, who wrote vivid historical works. Two short-lived poets, Lucretius and Catullus, are outstanding: the first wrote the long philosophical poem *The Nature of Things*, the second, called by Tennyson the “tenderest of Roman poets,” is famous for his lyric poems.

These writers all stand on the threshold of the Augustan Age—the period of the Emperor Augustus, when Latin literature reached its greatest heights. Virgil (70-19 B.C.) worked for ten years on the *Æneid* and seven years on his *Georgics*—poems describing farming, bee-keeping and so on. The odes, satires and epistles of Horace give him rank near to Virgil. Ovid, the favourite poet of the fashionable world, wrote in exile his most famous work, the *Metamorphoses*, in which he retells Greek and Roman legends. He had been banished

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from Rome by Augustus for being concerned in some scandal and for writing the *Ars Amatoria*, which offended against the strait-laced standards set up by the Emperor.

Livy, the greatest historian of his age, wrote a detailed history of Rome. There were many lesser writers, but only Martial, Tacitus and Juvenal stand out at the close of the classical period. The first was an epigrammatist, bitter and tender by turns, the second a powerful historian and the third a satirist.

In the second century we have the brief and still popular *Meditations of Marcus Aurelius*, *The Golden Ass* of Apuleius, and the biographies of the Cæsars, by Suetonius.

The great classics of Greek and Rome have had an immense influence on our literary culture. It is impossible to have a complete understanding of the literature of any European peoples without knowing something about the classical foundations of civilised thought.

### *English Literature Begins*

Extant English literature begins more than twelve hundred years ago. The chief Anglo-Saxon poems that have been handed down to us are *Beowulf*, the origin of which is obscure, and Cædmon's *Paraphrase*. Cædmon is the first of the English poets who is known by name. King Alfred gave an impetus to learning by translating Bede's *Ecclesiastical History* and other notable works, and by starting the *Saxon Chronicle*.

For some time after the Norman Conquest there



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were no notable developments in English literature. Wonderful poetry was being written in Italy by Dante (1265-1321), whose *Divine Comedy* is one of the finest works of the world. The love lyrics of Petrarch (1304-74), including his sonnets, are of great beauty, and his friend Boccaccio (1313-75), called the Father of Italian prose, is remembered for his stories in the *Decameron*. In the fourteenth century Geoffrey Chaucer raised English poetry to an art. The first poem of his that we are able to date with certainty is *The Book of the Duchesse* (1369). His fame rests chiefly on the *Canterbury Tales*, a remarkable collection of stories in verse with a prologue containing masterly portraits of the pilgrims who are supposed to tell the stories.

The invention of printing in the fifteenth century had a revolutionary effect on literature. It made possible for the first time a rapid interchange of ideas between scholars of various countries. The first book to be printed by Caxton in England is believed to be the *Dictes or Sayengis of the Philosophes* (1477), a translation from the French. The prose romance *Le Morte d'Arthur*, by Sir Thomas Malory, is a collection of Arthurian tales drawn mostly from French sources: it was printed by Caxton in 1495.

The fifteenth century is an uneventful period in the history of English literature, except for the rise to prominence of the ballads (short narrative poems) and the vital poems of John Skelton. A revival of interest in Greek learning was taking place on the Continent. In France, François Villon was writing highly original ballades. The intellectual revival did

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not spread to England until the sixteenth century, when our verse reached a wonderful level of beauty. Sir Thomas Wyatt (1503-42) produced the first English sonnet—a literary form developed a little later by Michael Drayton (1563-1631) and perfected by Shakespeare—and Henry Howard, Earl of Surrey (1516-47), wrote the first blank verse. Edmund Spenser (1552-99) is well in front of all the English poets who had followed Chaucer up to this period. *The Faerie Queene*, an allegorical epic, is Spenser's greatest work.

Sir Thomas More, the author of *Utopia* (1516), is counted the first writer of classical English prose. *Utopia* is a satirical romance dealing with an imaginary country run on model lines.

John Lyly (1554-1606) made the first approach to the novel in England with his *Euphues*. Contemporary with Lyly was Cervantes, Spain's famous soldier-writer, who wrote *Don Quixote*, a notable satirical novel. Another Spaniard, Lope de Vega (1562-1635), ranks high among European dramatists. Like the Elizabethans in England he gave the popular drama of his country an artistic form. His younger contemporary Calderon produced great tragedies and some delightful comedies. Some of the incidental lyrics in his plays are among the finest poetry written by Spaniards.

The chief work of Ariosto (1474-1533), the great Italian Renaissance poet, is the romance *Orlando Furioso*. Tasso (1544-95), the other great Italian poet of the period, is famous for *Jerusalem Delivered*, an heroic poem dealing with the First Crusade. Another remarkable historical poem, the

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*Lusiads*, was written in Portugal at this time by Camoens: it celebrates Vasco da Gama's expedition to India and contains superb descriptive passages. The *Lusiads* is Portugal's chief contribution to European literature.

### *The First Essays*

The foundation of the modern essay was laid in the sixteenth century by Michel de Montaigne (1533-92), the celebrated French writer, whose delightful essays were translated by John Florio and exercised a vast influence on English writers. The most notable figure of the sixteenth century in French literature is François Rabelais (1490-1553), whose extraordinary narratives *Gargantua* and *Pantagruel* earned for him a place among the foremost writers of the world. The chief French poet of the time is Ronsard (1524-85), the writer of exquisite lyrics, who was one of a group of poets known as the Pléiade, who based their work on Horace and other classical writers. They helped to establish the alexandrine (a line containing twelve iambic syllables), which is used so extensively in later French poetry.

Two great figures in philosophy belong to the sixteenth century—Francis Bacon (1561-1626), whose *Essays* reveal a fine prose style, and Descartes (1596-1650), the French philosopher who wrote the celebrated *Discourse on Method*.

In 1611 the Authorised Version of the Bible, the finest monument to English prose, was produced.

The Elizabethan Age was a period of magnificent achievement in English literature. In addition to the

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development of poetry and prose a remarkable change took place in the drama. Until about 1580 very little work of note had been done for the theatre. The first kind of play known in England was the mystery play—dramatised scenes taken from Biblical history. This was succeeded by the “morality” plays, the most notable of which is *Everyman*. Later came the “interlude,” a merrier type of work played between the acts of the morality play, which was written for moral improvement and was apt to be tedious.

At the beginning of Elizabethan drama stands Nicholas Udall (1505-56), from whom came the first real English comedy, *Ralph Roister Doister*, and Sackville and Norton, who together wrote *Gorboduc*, a tragedy in blank verse. George Peele, Thomas Lodge and Thomas Kyd were playwrights of ability, but genius did not make itself heard until Christopher Marlowe (1564-93) wrote *Tamburlaine*, *Dr. Faustus* and other plays.

### *William Shakespeare*

Drama attained an unrivalled excellence in the work of William Shakespeare (1564-1616), who with the immortals, Homer and Dante, leads the literature of the world. The student reads his masterpieces with sentiments similar to those that made Algernon Swinburne write: “It would be arrogant to assume that any tribute of praise or thanksgiving can glorify with any further glory the name that is above every other. . . . Of poetry pure and simple, imaginative and sublime, there is no master who has left us more. It is not only the crowning glory of

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England, it is the crowning glory of mankind that such a man should ever have been born."

His thirty-seven plays fall into three groups—historical plays, tragedies and comedies. Of the first the best known are *King John*, *Richard III*, *Henry V*, *Julius Cæsar*, *Antony and Cleopatra* and *Coriolanus*. The principal tragedies are *King Lear*, *Macbeth*, *Hamlet* and *Othello*, and the principal comedies are *The Merchant of Venice*, *Much Ado About Nothing*, *As You Like It*, *Twelfth Night*, *A Midsummer Night's Dream* and *The Tempest*.

Ben Jonson (1573-1637), the most conspicuous of Shakespeare's contemporaries, was a prolific writer of plays, whose style is of considerable interest. *Every Man in His Humour* is the greatest of his comedies. Beaumont and Fletcher, Philip Massinger, Thomas Dekker and John Webster (whose plays show real genius) made notable contributions to Elizabethan drama.

In recent years the mystical poetry of John Donne (1573-1631) has been highly praised. His contemporary Robert Herrick wrote delightful lyrics, and Donne's followers include the religious poets Crashaw, Vaughan and Herbert.

### *The "Great Age" of French Literature*

France has a parallel to the Elizabethan age in the seventeenth century, known as "le grand siècle," when her great dramatists flourished. There was Molière (1622-73), supreme as a writer of comedy, whose masterpieces are *Tartuffe* (satirising religious hypocrisy) and *The Misanthrope*; Corneille (1606-84) was then writing his tragedies (*The Cid*,

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*Andromeda* and *Œdipus* are examples)—his treatment of his themes is dignified and austere—and Racine (1639-99), also a tragedian, produced historical and biblical dramas (*Phædra* and *Athaliah* are examples). Pascal (remembered for his *Thoughts*), Rochefoucauld (celebrated for his *Maxims*), and La Fontaine, the witty poet, whose *Fables* are founded on those of *Æsop*, were writing at this time.

John Milton (1608-74) towers over all the poets of his day. Unparalleled beauty and grandeur mark his verse. *Paradise Lost*, an epic dealing with the fall of man, reveals qualities as rare as those found in the work of Shakespeare. *Paradise Regained* is its sequel. The chief of Milton's other works are the *Ode on the Morning of Christ's Nativity*, *L'Allegro*, *Il Penseroso*, *Comus*, *Lycidas*, and his sonnets. At the head of his prose writings, which are of singular power, is *Areopagitica*, a defence of the freedom of the Press.

English literature gained renewed strength during the Restoration Period (1660-1702). John Dryden (1631-1700) was writing brilliant poetry, notably *Annus Mirabilis*, which was followed by a great satirical work, *Absalom and Achitophel*, and *The Hind and the Panther*. The most famous of his odes is *Alexander's Feast*. After Dryden came Samuel Butler (1612-80), the Royalist poet, who in his satirical poem *Hudibras* poked fun at the Puritans.

Sir Richard Steele (1672-1729) and Joseph Addison (1672-1719) laid the foundations of periodical literature, contributing essays which have become famous to the *Spectator* and the *Tatler*, which Steele had brought into being.

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The greatest English verse of the eighteenth century came from Alexander Pope (1688-1744). *The Rape of the Lock* and *The Dunciad* show unique satirical powers and a mastery of the heroic couplet. Pope's *Essay on Criticism* is often quoted, and in the *Essay on Man* he wrote a criticism of life. His translations of the *Iliad* and the *Odyssey* are famous.

Notable English poets who come between the death of Pope and the advent of Wordsworth are James Thomson (1700-48), whose popular work is *The Seasons*, a descriptive poem in blank verse; Thomas Gray (1716-71), best remembered for his *Elegy in a Country Churchyard*; William Cowper (1731-1800) the favourite poet of his time; Thomas Chatterton, the brilliant boy poet, who poisoned himself in a fit of despair; George Crabbe (1754-1832), whose most remarkable work is *The Village*; and Robert Burns (1759-96), Scotland's famous lyric poet. The visionary William Blake (1757-1827) wrote some of the loveliest lyrics in our literature.

### *The Birth of the Novel*

The eighteenth century saw the birth of the English novel when Samuel Richardson (1689-1761) wrote *Pamela*. As has already been shown, John Lyly, in *Euphues*, had prepared the way for this kind of work. John Bunyan (1628-88), in setting out to preach a sermon, had written "a great novel of the road"; Daniel Defoe (1661-1731) had created *Robinson Crusoe*; and Jonathan Swift (1667-1745) had satirised mankind in *Gulliver's Travels*, but no one had produced a "slow-motion picture of

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life on its purely sentimental side " before Richardson's time.

*Pamela* inspired Henry Fielding (1707-54) to write his most amusing *Joseph Andrews*, which, like his *Tom Jones*, shows a very much robuster spirit than that found in the work of Richardson, whose masterpiece is *Clarissa Harlowe*.

Tobias Smollett (1721-71) did not pay attention to plot in the way that Fielding did, but undoubtedly he had great talent. His *Roderick Random*, *Peregrine Pickle* and *Humphrey Clinker* inspired Dickens to be a writer.

Laurence Sterne (1713-68), author of *Tristram Shandy*, and Oliver Goldsmith (1728-74), whose *Vicar of Wakefield* soon became famous all over the world, are two other novelists standing right apart from the host of writers who were attracted to fiction at this period.

Sir Walter Scott (1771-1832) created the historical novel with *Waverley*. His poems, *The Lady of the Lake*, *Marmion* and *The Lay of the Last Minstrel*, would have made him famous even if he had written nothing else.

Germany becomes prominent in literature in the eighteenth century. Klopstock (whose epic, *The Messiahs*, was inspired by Milton), Wieland (who wrote one of the first psychological novels—*Agathon*) and Lessing (critic and dramatist, whose critical work, the *Laokoon*, had great influence) headed the revival. Two German poets belong to the latter half of the eighteenth century: Johann Wolfgang von Goethe (1749-1832), author of *Faust*, the world-famous dramatic poem, and J. C.



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Friedrich von Schiller (1759-1805), whose greatest works are his *Wallenstein*, *Mary Stuart* and *William Tell*. Schiller also wrote a notable history of the Thirty Years' War. Goethe's novel, *Wilhelm Meister*, is an outstanding prose work of the period.

In France the brilliant satirist Voltaire (1694-1778)—famous in his day as a poet—was attacking intolerance and hide-bound theology (*Candide* and others of his short tales should be read), and J. J. Rousseau (1712-78) was anticipating the "Romantic Movement" and spreading new social theories. His *Confessions* is one of his chief works. Other French writers of the time are the Abbé Prévost (his *Manon Lescaut* is a classic), Beaumarchais, the dramatist, Le Sage, who wrote *Gil Blas* (a novel that influenced Smollett and Fielding), Montesquieu, Saint-Simon, Proudhon and Châteaubriand, another forerunner of the Romantic Movement. Italy's leading tragic poet Alfieri belongs to this century, and his contemporary Goldoni produced light, amusing comedies.

The first outstanding historical work in English came from David Hume (1711-76). His *History of England*, although not authoritative on account of inaccuracies, is one of the best examples of prose produced in the later part of the eighteenth century.

### *The Age of Johnson*

Other writers of the eighteenth century who are landmarks in English literature are Dr. Samuel Johnson (1709-84)—best remembered for his *Dictionary of the English Language* and *Lives of the Poets*, and shown to us as an unforgettable personality

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in Boswell's *Life of Johnson*, the greatest biography in the language; Edmund Burke (1729-97) the brilliant orator and author of the renowned political work *Reflections on the French Revolution*; Edward Gibbon (1737-94), immortalised by his *Decline and Fall of the Roman Empire*, and Richard Brinsley Sheridan (1751-1816), the lively writer of plays—*The School for Scandal*, *The Critic*, etc.

At the end of the century stands William Wordsworth (1770-1850) the great master of the Lake School of poets—so called because three of its members, Wordsworth, Southey and Coleridge, lived in the Lake District. *The Prelude*, showing the growth of a poet's mind, is a great autobiographical poem. *The Excursion* and the *Ode on Intimations of Immortality* are among the poems that served to make him a much-admired poet. Wordsworth was joint author with Samuel Taylor Coleridge (1772-1834) of *Lyrical Ballads*. Coleridge's best-known works are *The Ancient Mariner*, *Kubla Khan* and *Christabel*; he is also a great prose writer and critic.

Lord Byron (1788-1824) became famous with his *Childe Harold*. The greatness of his genius is seen in *Don Juan* and *The Vision of Judgment*. On the Continent he was considered the chief English poet next to Shakespeare.

Percy Bysshe Shelley (1792-1822) is placed with John Keats (1795-1821) among the supreme English lyric poets. *Adonais* is considered his best poem; the beautiful *Ode to the West Wind* is widely read. In his poetry Keats displays a splendid imagination and a rare sense of beauty. *Endymion*, *Hyperion*, *The Eve of St. Agnes*, *Isabella*, *La Belle Dame Sans*

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*Merci*, his odes and some of his sonnets are his best-known poems.

In the nineteenth century Lord Alfred Tennyson and Robert Browning are the chief English poets. Tennyson reached the height of his popularity with *In Memoriam*. *The Princess*, *Maud* and *The Idylls of the King* are examples of his longer works. Browning was a more original thinker than Tennyson, but he did not achieve the same degree of popularity, because he is not so easy to understand. *Paracelsus*, *Pippa Passes*, *Sordello*, *The Ring and the Book* are some of the works that have built up his reputation. His wife, Elizabeth Barrett Browning, has earned a place among poets who will endure with her *Aurora Leigh* and *Sonnets from the Portuguese*.

Matthew Arnold, Dante Gabriel Rossetti, Algernon Swinburne and Francis Thompson are others who wrote enduring verse in the nineteenth century.

During the first half of the nineteenth century fresh life was breathed into the English essay. William Hazlitt (1778-1830) wrote his delightful *Table Talk*, and Charles Lamb (1775-1834) produced his charming *Essays of Elia*, which have become classic. Thomas de Quincey (1785-1859), "opium eater," dreamer and genius, showed something quite new in prose when he wrote the *Confessions of an English Opium Eater* and *The English Mail Coach*. William Cobbett (1762-1835) in *Rural Rides* gave a vivid picture of the English countryside in his time. Walter Savage Landor (1775-1864), a poet of some distinction, produced memorable prose in his *Imaginary Conversations*.

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### *French Romanticists and Realists*

The French Romantic movement of the nineteenth century rises to its peak in the novels, plays and poetry of Victor Hugo (1802-85). *Les Misérables*, *The Hunchback of Notre Dame*, *The Toilers of the Sea* are among his chief novels: *Hernani* and several other plays of his are important. Hugo is generally regarded as the supreme lyric poet of France; he also wrote fine narrative poems. Other notable romantic poets are Gautier, de Musset and de Vigny. Gautier's influence is seen in the work of Baudelaire (1821-67), one of the greatest poets of the century. His follower Paul Verlaine (1844-96) is a poet of extreme subtlety and delicacy.

Novelists of the period include George Sand (pen name of Lucile Dupin), the elder Dumas (a remarkable figure who produced books by factory methods with a great staff of literary assistants, and whose works include *The Three Musketeers* and other popular romances), and Prosper Mérimée, the writer of *Carmen* and other highly finished novels.

Important novels were produced by Balzac (1799-1850) and Gustave Flaubert (1821-80), both of whom stand midway between the realists and the romanticists. The former wrote *Père Goriot*, the series forming *The Human Comedy* and some great short stories (e.g. *Jesus Christ in Flanders*), and the best-known works of the latter are *Madame Bovary* and *Salammbô*. A thoroughgoing realist is Émile Zola (1840-1902) whose *Rougon-Macquart* series consists of a score of interlinked novels. De Maupassant (1850-93), supreme as a short-story writer, was a follower of Flaubert, and with the de

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Goncourt brothers, whose chief work is *Germinie Lacerteux*, he belongs to the realistic or naturalistic school. Alphonse Daudet is associated with this movement. His works include *Sapho*, the humorous novels of which Tartarin is the hero, and *Letters from My Mill*, delightful studies of life in the South of France.

Other French prose writers of the period are the celebrated critic Sainte-Beuve (1804-69), the historians Michelet, Thiers, Guizot and Thierry, and Renan, the rationalist. Towards the end of the century another notable novelist appears—Anatole France (pen name of J. A. Thibaut), whose delicate irony won him a world-wide reputation. *The Crime of Sylvestre Bonnard* and *Penguin Island*, a sociological satire, are representative novels of his.

The chief figures of the century in Italy are Mazzini (1805-72), the political writer, the poet Leopardi (1798-1837), whom Matthew Arnold ranked with Milton, and Carducci (1836-1907). The leading Italian novelist is Manzoni (1785-1873). *The Betrothed*, a historical novel, is his best work. In Germany there is Heinrich Heine (1797-1856), writer of exquisite lyrics. The prose style of Nietzsche, the philosopher, is remarkable for its poetical character. Two notable German dramatists, Hauptmann and Sudermann, were born in the middle of the century.

### *The Russian Novelists*

Russia, hitherto unimportant in literature, comes very much to the fore in the nineteenth century. Her poets Poushkin (1799-1837) and the lesser

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figure Lermontov (1814-41) must be mentioned. Her chief novelists include Gogol (1809-52) whose *Dead Souls* is important, and the great triumvirate Dostoevski, Turgenev and Tolstoi. Dostoevski (1821-81) sounds the depths of human experience in *Crime and Punishment* and *The Brothers Karamazov*. At the age of twenty-eight he was sentenced to four years in the Siberian chain gang, an experience that he afterwards described in *Memoirs from the House of Death*. Turgenev (1818-83) had a wonderful insight into character, as may be seen in his novels *Smoke* and *Fathers and Children*. The masterpieces of Tolstoi (1828-1910) are *Anna Karenina* and that vast canvas of Russian life *War and Peace*. A later Russian writer Anton Chekhov (1860-1904) is a master of the short story. Andreev (1871-1919) and Maxim Gorki are prominent writers of the present century.

In the last century Scandinavian literature is to the fore with the highly important plays of Ibsen (1828-1906), including *A Doll's House* and *The Master Builder*, and the novels and other writings of Björnson. These two authors are Norwegians. The chief Danish writer is the critic Georg Brandes, who won an international reputation. In Sweden we have the playwright Strindberg (1849-1912) and, more recently, the novelist Selma Lagerlöf, a winner of the Nobel prize.

### *Great English Novelists*

In the nineteenth century, too, some of the greatest English novels were written. Charles Dickens (1812-70) created his amazing gallery of

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comic characters, whose names have become the most expressive attributes for certain types of person. Dickens often made his books a medium for propaganda. *Bleak House* describes the miseries arising from a lawsuit; *Little Dorrit* showed life in a debtor's prison. Among his first works was *Pickwick Papers*, which was a tremendous success.

Dickens's contemporary, William Makepeace Thackeray (1811-63), has given us some unforgettable portraits of men and women. Dickens dealt with humble people, Thackeray with the upper classes of society. His chief works are *The History of Pendennis*, *Vanity Fair*, *Henry Esmond* (considered his masterpiece), *The Newcomes* and *The Virginians*.

Several women have helped to build up the English novel. Fanny Burney (1752-1840) came first on the scene with her delightful *Evelina*; Jane Austen (1775-1817) created a delicate domestic fiction with *Pride and Prejudice*, *Persuasion*, *Sense and Sensibility* and other novels of a flawless workmanship which has never been equalled; Charlotte Brontë (1816-55), in *Jane Eyre*, *Villette* and *Shirley*, and her sister, Emily Brontë, in *Wuthering Heights*, dealt with the passion of love in a way that was entirely new; George Eliot (1819-80) exhibited an original intellectual force which is seen at its best in *Middlemarch*, *Adam Bede* and *Silas Marner*.

### *The Later Victorian Period*

Anthony Trollope, whose novels—notably the Barsetshire Series—have of recent years gained renewed popularity, marks the end of the mid-

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Victorians. The later Victorian novel owes a good deal to George Meredith (1828-1909), whose intellectual power and penetrating insight into human nature established him as a notable writer. Peculiarities in his style have prevented many readers from appreciating his books. *The Egoist*, *Richard Feverel*, *Beauchamp's Career*, *Diana of the Crossways* and *Rhoda Fleming* are his best achievements. Meredith is a fine poet too. His *Modern Love* is one of his best works. Other late Victorian novelists of note are Edward Bulwer Lytton, author of *The Last Days of Pompeii*; Benjamin Disraeli (Lord Beaconsfield), who wrote *Sybil* and *Coningsby*; Charles Kingsley, remembered for *Westward Ho!*, *Alton Locke* and *Yeast*; R. D. Blackmore, whose fame rests on *Lorna Doone*; and Charles Reade, who came into prominence by writing *The Cloister and the Hearth* and other novels.

In a remarkable novel, *The Way of All Flesh*, Samuel Butler (1835-1902) lashes at Victorian narrowness and respectability. His *Erewhon* is one of the finest satires in English. G. B. Shaw is regarded as a disciple of Butler. George Gissing (1857-1903) wrote autobiographically in the *Private Papers of Henry Ryecroft*; the number of his admirers has grown considerably since his death. R. L. Stevenson (1850-94) is, of course, the supreme romantic novelist of his period: *Kidnapped* is regarded as his best work and his short stories are outstanding.

Midway between the novel and the travel work stand the colourful and rousing productions of George Borrow (1803-81), *Lavengro* and *The*



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*Romany Rye*: his *Travels with a Bible in Spain* is a great travel book.

Some of the finest prose of the century was written by John Ruskin (1819-1900), who devoted his long life to expounding his views on art (e.g. *Modern Painters*, *The Seven Lamps of Architecture*) and on sociology (e.g. *Unto this Last* and *Fors Clavigera*).

Thomas Carlyle (1795-1881) dominates the Victorians. *Sartor Resartus* startled the literary world with its original thought. His *French Revolution* is a wonderful piece of historical writing. The *Letters and Speeches of Cromwell* and the *History of Frederick the Great* are other works that gave a fresh stimulus to the reading of history.

The technique of history writing was brought to a still higher point by Lord Macaulay (1800-59), who used a pictorial, dramatic style in his *History of England* that helps the reader to build up ineffaceable scenes. His critical and historical essays are still read with great pleasure. He produced some lively verse in the *Lays of Ancient Rome*.

Other eminent historians of the nineteenth century are James Anthony Froude, who wrote most entertainingly about the Tudor period in the *History of England from Wolsey to the Armada*; Edward Augustus Freeman, who wrote the *History of the Norman Conquest*, which makes a close investigation of the beginnings of our history; J. R. Green, famous for his entertaining and instructive *Short History of the English People*; and W. E. H. Lecky, who is best known for his *History of England in the Eighteenth Century*, *History of Rationalism* and the *History of European Morals*.

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### *American Literature*

American literature of the nineteenth century contains some prominent names. Washington Irving (1783-1859), the writer of *Rip van Winkle* (contained in his "Sketch Book"); Fenimore Cooper (1789-1851), well known for his Red Indian romances, and the nature poet and translator of Homer, William Cullen Bryant (1794-1878), were the first American writers to gain a reputation in England. They were followed by the essayists Emerson, Thoreau and Oliver Wendell Holmes, and by Nathaniel Hawthorne (1804-64), who is regarded as America's greatest novelist—*The Scarlet Letter*, dealing with Puritanism in New England, is his masterpiece. Another early novelist of importance is Herman Melville, writer of *Moby Dick*, *Typee*, etc. A lesser figure, Harriet Beecher Stowe, must be mentioned on account of her extremely popular anti-slavery novel *Uncle Tom's Cabin*.

American poetry becomes prominent in the hands of Edgar Allan Poe (1809-49)—also a masterly short story writer; of Longfellow (1807-82); and of Walt Whitman (1819-92), a bold pioneer spirit whose *Leaves of Grass* ranks very high in American literature. James Russell Lowell (1819-91) is remembered for his *Biglow Papers*—humorous verse with a serious purpose.

Other prose writers of this period are the historians Prescott (whose best work is *The Conquest of Mexico*), Motley, who wrote *The Rise of the Dutch Republic*, and Francis Parkman, who wrote picturesquely of French-Canadian history.

The chief later writers are Samuel Clemens,

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better known as "Mark Twain" (1835-1910), a world-famous humorist, and Henry James (1845-1916), whose novels (e.g. *The Wings of a Dove*) are remarkable for their detailed psychological analysis. James became a naturalised Englishman in the last year of his life. His *The Turn of the Screw* is one of the best ghost stories ever written. Ambrose Bierce (1838-1914) is noted as a short story writer, and the stories of O. Henry, pen name of Sydney Porter (1862-1910), have won great popularity. The novelists Stephen Crane and Frank Norris are also of note.

Modern American literature is in a flourishing state. Among the many important writers of today are Sinclair Lewis, who was awarded the Nobel Prize in Literature, Theodore Dreiser, Edith Wharton, Richard Aldington, Eugene O'Neill, Robert Frost and Willa Cather.

### *Modern English Writers*

In England, George Moore (1857), whose fame was established when he wrote *Esther Waters*, and Thomas Hardy (1840-1928) are eminent Victorians who have bridged their own and this age. Hardy's *Tess of the d'Urbervilles* is his best-known work. He produced a remarkable dramatic epic, *The Dynasts*, and his lyrics are of considerable importance.

Other outstanding writers of this century are Lytton Strachey, the biographer; Joseph Conrad, the Pole who wrote romantic novels in English; John Galsworthy, H. G. Wells, Arnold Bennett, G. B. Shaw, Rudyard Kipling and W. B. Yeats (the last three are Nobel Prize winners). John Masefield,

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the Poet Laureate, is one of several notable living poets. Besides Yeats, Ireland has produced several conspicuous writers during the last fifty years; J. M. Synge (1871-1909), the dramatist, and G. W. Russell ("Æ.") must be mentioned.

Contemporary and recent European literature contains among other outstanding figures Romain Rolland, the French author of *Jean-Christophe*, Maurice Maeterlinck, the Belgian dramatist, Thomas Mann, the German novelist and Nobel Prize winner, and another Nobel Prize winner, Sigrid Undset.

### EXERCISES

*Read one of the great Russian, French or German novels or short stories and set down your impressions, comparing it, if possible, with an English novel or story of a similar type.*

*Write an essay stating what you know of Shakespeare's debt to previous writers and to classical literature.*

*Write a study of one of the leading characters in a novel by Dickens, Thackeray or Jane Austen, or some other outstanding author.*

## *Chapter VI*

### A SURVEY OF ART

THE story of art begins in a very remarkable way with a series of realistic carvings on bone and paintings on cave walls in France and Spain that date from the Old Stone Age. Primitive man during the hunting period was of necessity an acute observer and dexterous with his hands. This may account for the astounding skill with which he drew the mammoth, the bison, the wild boar and other animals with which he was familiar.

After this preliminary flourish there is a long blank (the art relics of the agricultural stage of primitive mankind are childish symbols on pottery, etc., such as a circle to represent a head) until men turned to the building of cities. Art had its place in all the ancient civilisations mentioned in Chapter I.

#### *The Great Greek Sculptors*

Ancient Greek art marks an important step forward. The Greeks excelled in vase painting, architecture, sculpture and painting, just as they did in literature. A long period of preparation led up to the artistic triumphs of the age of Pericles (fifth century B.C.). The outstanding sculptor of this era is Pheidias, one of whose masterpieces—a statue of

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Athena, six times life-size—stood in the Parthenon. With him must be named his pupil Alcámenes, Polycletos (who is said to have defeated Pheidias in a sculptural competition), and Myron, whose Discus Thrower is famous.

None of the famous statues of the time of Pheidias has survived, but many are known to us by means of copies or copies of copies. In 1880 a miniature copy of Pheidias' famous Athena was unearthed during street excavations in Athens.

The remains of the Parthenon friezes in the British Museum are one of the chief glories of Greek sculpture.

Later Greek sculpture is of a more personal nature. In the fourth century B.C. such sculptors as Scopas, Praxiteles and Lysippus set out to express human emotions in their work. The well-known Venus of Milo belongs to the "school" of Praxiteles.

We know little of ancient Greek painting beyond vase-work. Apollodorus, Protogenes (an animal painter), Xeuxis and Apelles (the greatest of all Greek painters) are important names.

### *Art in Ancient Rome*

After the death of Alexander the Great some notable sculptures were produced by artists now unknown, including the Laocoön and the Apollo Belvedere, but in general there was a decline in Greek art. In the third century the huge bronze Apollo at Rhodes, 105 feet high, and other colossal statues were produced. With the Roman conquest in the second century, the Romans practically

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stripped Greece of her movable artistic treasures. Ancient Rome became enthusiastic about Greek sculpture, and her artists (mostly Greek immigrants or slaves) were employed mainly in the production of copies or imitations of Greek originals. Some modern authorities maintain that a genuine Roman art developed; others that Roman art is merely a later phase of Greek art. There are, of course, many fine Roman sculptures—among them Trajan's Column and numerous portraits. The best Roman busts reveal a remarkable insight into character. Caracalla's busts are notable.

Our knowledge of Roman painting is scanty; but wall paintings, including some delightful landscapes, were preserved for the modern world in the buried cities of Pompeii and Herculaneum. The Romans also produced fine mosaics, which have survived in large numbers.

The art of the Western world was continued through the Dark Ages in Constantinople (Byzantium). A new style of architecture of great richness—the Byzantine style—was developed in which the Roman arch was applied in new ways and in which Eastern influences are noticeable (the Cathedral of St. Sophia is a noteworthy example), and buildings were decorated with magnificent mosaic wall-paintings. In Europe generally art was at a standstill, but painting was continued by the monks who illuminated MSS., and some unknown sculptors produced remarkable stone crosses in Britain.

At this period the Chinese were developing the art of painting in water colours on silk, and achieved

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a delicacy and subtlety that had no parallel in Europe for over a thousand years.

### *Gothic Art*

What is called the Gothic influence gave an impetus to art in Northern Europe after the eleventh century. France took the artistic leadership by reason of her architecture (Notre Dame Cathedral, for instance), statuary, carved ivories and stained glass until the end of the thirteenth century, when Giotto (1266-1337), the first great Italian painter, emerges. (Cimabue, Giotto's master, is usually regarded as the "father of Italian painting.") Giotto humanised painting and he is of course equally famous as architect and sculptor—in these arts his masterpiece is the famous Campanile (bell tower) at Florence. The Pisano family made important contributions to the sculpture of the century. Niccola Pisano (1206-78) is the starting-point of Italian sculpture. He was pre-eminent also as architect.

In Germany many religious painters were at work, and within a century Hubert and Jan van Eyck in Flanders had perfected the art of oil painting. Hitherto tempera painting (i.e. painting in distempers) had predominated. With the minutely realistic, richly-toned canvases of the van Eycks a new and powerful influence was felt in painting. Through the work of such men as Roger van der Weyden (pupil of Jan), Hans Memlinc and Quintin Matsys (who began his working life in a smithy), Flanders maintained an important place in the world of art in the fifteenth century. Germany responded to the realistic movement in the middle of this century—



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notably in the paintings and engravings of Martin Schongauer—and the century ended with the rise of Albrecht Dürer (1471-1528), who ranks with the world's greatest artists. The minute precision of his brush-work astounded his Italian contemporaries, but he is at his best in woodcuts and etchings.

### *Rise of Italian Painting*

Meanwhile the art of painting had begun to flower prolifically under the Italian sun. In the fourteenth century Orcagna (also a great sculptor and architect) carried on the tradition of Giotto; at Siena, Simone Martini and the Lorenzetti were at work, and Fra Angelico was painting his fervently religious pictures in a Florentine monastery. The next century (during which the Renaissance began) saw the revival well under way with the work of Masaccio—who showed an advance in executive skill and painted mythological subjects—of Botticelli (unrivalled for his clarity and tender grace of line), Filippino Lippi, Ucello (who developed the technique of drawing in perspective), of Pollaiuolo (who adopted oil painting), of Verrocchio (the master of Leonardo da Vinci and a celebrated sculptor), Ghirlandaio and, later, Fra Bartolommeo (who worked in the monastery made famous by Fra Angelico) and Andrea del Sarto, called “the faultless painter.” All these painters belong to the Florentine school. Siena at this time was declining as an art centre—her painters adhered to the ideals of the preceding century; but in other parts of Italy pioneer artists were active. Mantegna and the Bellinis (Giovanni and Gentile, father and son) in North Italy, and the Umbrian realists, de

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Franceschi, da Forlì and Signorelli, are outstanding figures. Giovanni Sanzio (Raphael's father) and Raphael's great teacher Perugino also belong to the Umbrian school.

At the beginning of the century Lorenzo Ghiberti (1378-1455), the sculptor, was producing his famous bronze gates with pictorial panels for the Baptistery at Florence. He worked on them for forty years. Brunelleschi, Donatello, Masaccio, della Quercia, and later the della Robbia brothers and Verrocchio were his most notable contemporaries.

All this activity culminated in a great period of Italian painting—roughly speaking between 1490 and 1590—when most of the supreme masters of painting were at work. Leonardo da Vinci (man of many parts—engineer, scientist, inventor, architect, musician, writer and sculptor as well as painter), known to everyone by his *Monna Lisa*, finished his famous *Last Supper* about 1497. Michelangelo, sublimely forceful and inspired, painted the ceiling of the Sistine Chapel during 1508-12, the *Last Judgment* about 1540, and completed the Dome of St. Peter's, Rome, about four years before his death in 1564. He excelled, too, in sculpture, considering himself a sculptor rather than a painter. Raphael's life was comparatively short (1483-1520), but during some twenty years he produced more pictures than many artists who lived to twice his age. His coloration is often somewhat cold but he is unsurpassed in other branches of his art, and he is regarded by many as the world's greatest artist. The Sistine Madonna and the Vatican frescoes are among his best work. With him must be named Correggio of the school of Parma,

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and the Venetians, Giorgione, Titian (renowned for his exquisite coloration), and Tintoretto (dramatic and original—hailed by Ruskin as the world's foremost painter).

The sculpture of this period is not less important. Michelangelo is the supreme figure (his David, Moses and the Medici tombs are among his masterpieces). Other great sculptors of his time are Benvenuto Cellini, Giovanni da Bologna and Jacopo Sansovino.

Beside the illustrious painters of the South, the North can place the great figures of Dürer (also a fine wood-carver) and Hans Holbein the younger (1497-1543). The latter is of special interest to us because he lived much in England from 1526 until his death, and painted the portraits of many prominent English people, including Henry VIII. He represents the peak of the realistic style of portrait painting followed by the van Eycks. With Holbein the great days of German art come to an end.

### *The Main Currents in European Art*

During the whole of the foregoing period two distinct trends are noticeable in European art. In Italy artists were for centuries preoccupied by religious subjects—art was carried on under the wing of the church. In the North the church's influence was less pronounced (Protestantism did not favour church paintings), and artists turned to a variety of themes outside the church. Patinir (1475-1524), who was probably the earliest painter to specialise in pure landscapes, belonged to the Flemish school. The remarkable Breughel family painted homely every-

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day scenes, flowers and landscapes—Peter Breughel is a master of “low life.” Portraiture flourished in the North. At the time when Italian painters were limited to flat profile portraits, Northern painters (e.g., Jan van Eyck and Memlinc) were producing lifelike three-quarter face portraits full of insight into character. The Italians, beginning with the Bellinis, however, made rapid strides as portraitists. Moroni (1549-78) may be mentioned here on account of his celebrated and lifelike *Tailor* in the National Gallery.

This widening of the frontier of painting had a big influence on the further course of Northern art, but Italy began to drop into the background in the seventeenth century. The three Caracci, Ludovico and his cousins Agostino and Annibale, and their followers Guido Reni, Domenichino and others tried to revivify Italian art with a synthesis of the methods of their great predecessors, but their work is mostly mechanical. Caravaggio led a reaction against the Caracci school by adopting realistic methods. His successors, Spagnoletto and Salvator Rosa, are of some note. The latter is one of the first landscape painters to interpret nature in forbidding moods.

### *Painting in Flanders and Spain*

Outside Italy, however, art continued on a high plane. Rubens (1577-1640), the greatest Flemish painter, studied in Italy and adopted Italian technique, painting with an exuberant vitality. Over two thousand pictures are attributed to him, but many of these are partly or wholly executed by his

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pupils—of whom Jordaens, Van Dyck, Teniers, Snyders and others later became famous. Van Dyck (1599-1641) came to England several times, and one of his chief paintings is a portrait of Charles I. He had a big influence on English portrait painters, among them Lely (a German by birth) and Kneller. In the year of Van Dyck's birth, another and greater portraitist, Velasquez, was born in Spain. A lesser Spaniard, Murillo, was his contemporary. Spanish art has only one other great figure, Goya, in the eighteenth century, whose portraits and scenes of Spanish life are often powerful and expressive. El Greco, a Greek who came to Spain in the sixteenth century, produced strange and original religious pictures and landscapes. His works have been highly praised in recent years.

### *Dutch Art Begins*

To return to Northern Europe we find that in the early seventeenth century Dutch art develops a character of its own. A few Dutch painters followed the example of Rubens in Flanders and adopted Italian methods, but for the most part the Dutch followed the "nationalistic" lead set by Franz Hals (1584-1666)—renowned for his sweeping brushwork—and the still greater master, Rembrandt (1606-69)—supreme in his use of light and shade. Both rank high among portrait painters. Rembrandt is great, too, as a religious painter and landscapist. (In 1911 there was a big outcry when his *Mill* passed from England to America for £100,000.) Van der Helst is another outstanding portraitist of this period.

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Dutch painting of this century developed along two broad lines—*genre* (scenes from everyday life) and landscape. In the former, the chief artists are De Hooch and Vermeer of Delft (both produced delightful Dutch interiors), Van Ostade (painter of rustic subjects), Wouwerman (painter of cavalier scenes—in most pictures he introduces a white horse), Terboch and Metsu (painters of aristocratic interiors), and Jan Steen (a satirist). Vermeer of Delft painted two superb landscapes (his View of Delft is filled with soft light), but in connection with Dutch landscape painting we think rather of Ruysdael, Hobbema, Cuyp, Paul Potter (the last two are noted painters of cattle) and their associates. Excellent marine paintings were produced by van de Cappelle (whose pearly skies have not been surpassed) and W. van de Velde. There was also an active group of painters of still life (household utensils, fruit, flowers, game, etc.).

### *English Portrait Painters*

The Dutch *genre* painters were the forerunners of Hogarth (1697-1764), with whom modern English art begins—a great and original painter of everyday scenes, and a brilliant portrait painter. In his time the leadership in portrait painting passed to England with the masterly productions of Gainsborough (1727-88)—also a pioneer English landscapist—and Reynolds (1723-92), founder of the Royal Academy, who developed the methods of Van Dyck and Rubens. Zoffany, Romney and Raeburn in the next generation are not far below

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them in importance, and Lawrence and Hoppner are both of note.

France leaps to prominence in the seventeenth century with the great landscape painters Poussin and Claude, and the court painter Charles Le Brun, who also created the style of furnishing known as Louis Quatorze. Le Brun was director of the Gobelins, the famous French factory where furniture, tapestry, bronzes and jewels were produced for the luxury-loving society of Louis XIV's reign.

Except in England, the eighteenth century is everywhere a period of artistic decline. In France, a few notable men stand out. Watteau (1684-1721) painted with delicacy and poetic charm the frivolous life of his time (the reign of Louis XV). His followers were Lancret, Pater, Boucher and Fragonard. Quite apart from these courtly painters is Chardin (1699-1779), celebrated for his paintings of still life and his homely domestic interiors. Greuze (1725-1805) is still esteemed for his graceful paintings of girls' heads.

### *The Re-birth of French Painting*

A reaction against the frivolities of Boucher was started by the severely classical painter David (1748-1825), who played an active part in the French Revolution and signed Louis XVI's death warrant. His regenerating influence was felt in all European centres of art, and both directly and indirectly he gave new life to French painting in the nineteenth century. Ingres (1780-1867), a historical and portrait painter, continued David's work. Inevitably there was a reaction to the reaction of

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David. The Romantic movement was beginning, and in French art Delacroix (1798-1863) was its champion. His rich colour harmonies shocked the classicists. Romanticism in its later developments in painting became insipid, and so there was still another reaction, this time in favour of realism. Courbet (1819-77) set out to bring painting into closer contact with actual life. At the same time Manet was developing a new technique by seeing each of his subjects as a whole, and painting what he saw in a direct, free manner, and Daumier (1808-79) was revealing his powers as a satirist.

Outside Paris, at Barbizon, a small town in the forest of Fontainebleau, another important phase of art had come into being. A group of artists headed by Theodore Rousseau (1812-67) had set to work to paint nature with a new vision closely allied to that of the Englishman, Constable. The artists belonging to or associated with the Barbizon school are Millet (who painted powerful pictures of peasant life—he was the son of a peasant), Corot (who produced mysterious, poetical landscapes), Diaz (a brilliant colourist) and Daubigny.

Puvis de Chavannes (1824-98), the mural painter, is a solitary figure, unaffected by any of the controversies of his contemporaries. There are frescoes by him at Paris, in the Pantheon and the Sorbonne.

### *English Landscapes*

The beginnings of the great period of English landscape painting which dominated our art in the first half of the nineteenth century are to be found in the preceding century. Richard Wilson (1714-82)



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took his inspiration from Italy, and when he painted English scenes often gave them an Italian character; but he was a great pioneer. Alexander and John Cozens (father and son), who were Wilson's contemporaries, marked another step. They played a big part in the development of water-colour painting. The Norwich School of painters, founded by John Crome (1768-1821) and with John Sell Cotman as its only other important member, was the third formative influence. Crome ended the tradition of giving trees a brownish colour and showed that the English countryside is as good a subject as Italy for a painter's brush.

Turner (1775-1851) and Constable (1776-1837), built upon this carefully prepared ground. Turner—the son of a Covent Garden barber—is a universal painter, a creative genius of the calibre of Michelangelo. He was unrivalled during his day in his mastery of the painting of light, which he learnt partly from Claude's work. (Although Claude had been dead a century, Turner regarded him as a rival, and was not content until he felt that he had surpassed the Frenchman.) Turner's great works are all to be found in England and are mainly in the Tate Gallery and the National Gallery. Probably no other artist, and certainly no landscapist, rivals him in the number and variety of his paintings, water-colours and pencil drawings.

Constable is a lesser figure, but in his truth to nature and in his treatment of the effect of atmosphere in holding a scene together, he had a far bigger influence on European painting. His representation of grass and trees in fresh, realistic greens was con-

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sidered revolutionary at the time, but it showed the way to the nature painters who came after him—notably the Barbizon School in France.

Another development of some importance in nineteenth-century English art is the appearance of the pre-Raphaelites and their associates (Ford Madox Brown, Holman Hunt, Millais, Burne-Jones and Dante Gabriel Rossetti), who reacted against the conventionality of most of the painting of their time and sought to paint with the directness of vision of the Italian painters before the time of Raphael. G. F. Watts, their contemporary, is another painter of note; his portraits are superior to his once popular allegorical pictures. The sculptor Alfred Stevens (1817-75) painted delightful portraits.

The coming of the American Whistler (1834-1903)—great as an etcher, as a portraitist and as a painter of elusive aspects of nature—created a stir in English art. Whistler was influenced strongly by Japanese prints, then first becoming known.

### *Impressionism*

The French Impressionists emerge after 1860: they have had an immense influence on modern art. Manet, already mentioned, is regarded as the founder of the school, but he has affinities with the Realists also. Monet, Renoir and Pissarro belong to this group; Degas is associated with it.

The Impressionists aimed at capturing the effect of a scene viewed as a whole and not as a collection of separate items to be pieced together on a canvas. They attached great importance to light. It became their aim to paint light rather than shapes. To this

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end they used a new technique in which the primary colours of the light spectrum were applied to the canvas in dashes with as little mixing as possible—for instance, many tiny dashes of red, green and yellow placed side by side produce a luminous brown when viewed at a short distance, whereas a brown pigment has a dull effect. Monet's series *The Haystacks*, showing his subject in different lightings, is a typical instance of his preoccupation with light. Pissarro and Renoir (mainly a figure painter) used the "dash" method. Degas was not so revolutionary: he excelled in realistic scenes, full of movement, from popular life and the life of the theatre.

Cezanne (1849-1906), a very individual artist, is outside this group, but he also was interested in solving the problem of painting light, aiming at the same time at giving his subjects solidity, and at creating the illusion of weight. He is regarded as the "father" of the Post-Impressionists.

### *After Impressionism*

The Impressionists' theories about painting light were elaborated into a scientific artistic system (known as Neo-Impressionism) by Georges Seurat (1859-91) and Paul Signac. Pissarro adopted this system for a time. Several other art movements followed Impressionism; they are often described collectively by the term Post-Impressionism. Vincent van Gogh (1853-90), a Dutchman, revived Impressionistic technique by using thin lines of pure colour instead of dashes. His work is strong and humane. Gauguin (1848-1903) did his best work in Tahiti, where he painted the natives with a child-

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like directness of vision and in a simple primitive style. His influence is seen in Matisse, whose extreme economy of means and distortions of form (for the sake of emphasis) still puzzle the ordinary visitor to art galleries.

A similar bewilderment is produced by much of the later work of Picasso, one of the founders of Cubism, who began his career with charming, delicately executed works in the conventional style. Futurism, another pre-war movement, produced some daring experiments. The futurists were concerned largely with the expression of motion and growth; they depicted objects as they appear during a period of time and not at a single moment of time.

### *Sculpture since Michelangelo*

During the seventeenth and eighteenth centuries European sculpture is uneventful. There are a few notable names, among them the graceful Italian Canova (1757-1822), the Englishmen Grinling Gibbons (1648-1721), a wood-carver of genius, and Flaxman (1755-1826). In the nineteenth century, however, there is something of a revival, and one man, Rodin (1840-1917), towers over all his contemporaries. He is ranked by many critics with the greatest men of the past. He applied the principles of Impressionism to sculpture in his huge statue of Balzac. Later sculptors of note include Mestrovic, the Jugo-Slavian, Gaudier-Brzeska (1891-1915), the young Frenchman who worked in England, Jacob Epstein (born in America) and the Englishmen Eric Gill and Frank Dobson.

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### *Modern British Painting*

The World War was a period of activity in English art. Among the artists who produced distinguished war pictures are C. R. W. Nevinson, John and Paul Nash, Wyndham Lewis and Eric Kennington. Many notable artists of the war period made their names before the war, e.g., Sir William Orpen, Muirhead Bone, Sir John Lavery, Walter Sickert, Henry Lamb, Sir D. Y. Cameron, Sir William Rothenstein, and the leading mural painter Frank Brangwyn. An outstanding figure in twentieth-century British art is Augustus John, and one of the most brilliant painters of the past half-century is the Anglo-American John S. Sargent (1856-1925).

### EXERCISES

*Visit a picture gallery or examine reproductions of representative European paintings and*

1. *Compare Flemish paintings of the fifteenth century with Italian paintings of the same period and set down your observations giving reasons for your preferences in not more than 400 words.*

2. *Compare the coloration and atmosphere of outstanding paintings before and after the introduction of Impressionism and comment on the differences in not more than 400 words. Can you name any painters who anticipated the colouring of the Impressionists?*

## *Chapter VII*

### HOW TO APPRECIATE ART

DIRECT appreciation sometimes fails the visitor to an art gallery. He sees some exhibit which he is told is a masterpiece and he fails to discover any merit in it. To him it is merely a shapeless or broken lump of marble or a piece of canvas covered pointlessly with paint, either in an absurdly simple or bewilderingly complex way.

The first step in such a case is to "place" the artist or sculptor. When we know how he fits into the historical scheme of things, we can often decide what he is aiming at, and this means that we are on the road to understanding him. For instance, the early Italian painters were simply illustrators of the Bible story. They depicted (at the behest of the Church) the chief biblical events for the benefit of the simple folk of their time who could neither read nor write. We must not look in these pictures for subtleties that their creators did not intend them to contain, and then complain that we cannot find these subtleties. We must look for the qualities that the artist deliberately put into his work—tenderness of colouring, grace of line, gentleness of treatment in a Nativity picture, or strength of colouring, force of line, power of design in a picture of a martyrdom.

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One big obstacle that prevents many people from enjoying a wide range of art is the fact that they have a favourite type of picture and use it to judge and condemn all types of pictures that differ from it. Many people who are in this unfortunate position take the " picture that tells a story " as their standard of what art should be. These people should ask themselves two or three very serious questions: What do I really like in this, my favourite, picture? Do I like the subject so much that I am prejudiced in favour of the picture? Have I ever looked at the picture *as a picture*? Looking at it impartially, and disregarding the pleasing associations awakened by the subject (which are my contribution to the picture, not the artist's), is it a good picture, a sincere picture, an original picture? Does it satisfy me as a design, as a piece of colour?

Some such mental examination as this is a valuable aid to the better appreciation of painting. There are still many people who would say that their favourite tune is " Onward Christian Soldiers " until they looked into the matter with a critical mind and discovered that parts of this " tune " are completely lacking in tunefulness (the first five notes, for instance, are all of the same pitch). After that they would go on to discover that it is the steady marching rhythm of the tune that appeals to them, coupled with some pleasant associations of singing the tune in childhood, in well-loved surroundings, or in the company of dear ones. In the same way, we may discover that the pictures we set up as standards of painting are not pictures at all if they are measured from an artistic

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standpoint. We merely like the likeable ideas that we ourselves put into the pictures.

Being honest with oneself is a necessary preliminary to the full enjoyment of art: another requirement is to look at pictures with an active and inquiring mind. We must not admire a picture merely because we are told that it is a great picture. If its greatness is not immediately apparent we must try to find out why it is great, and probably we shall then track down the defect in our own outlook that is preventing us from appreciating it.

The dilapidated state of much ancient Greek sculpture blinds many people to its merits. Obviously it is rather hasty of us to confess our inability to appreciate Greek art if we judge it and condemn it by a few jagged fragments of marble. We must first of all see some complete specimens of the best Greek work, or some accurate copies of such work. We must familiarise ourselves with the ideal that dominated sculpture in ancient Greece by studying the most perfect of the figures in the Elgin Marbles. But we must not make the mistake of adopting the Greek standard and condemning all kinds of art that do not conform to it. The Greek standard is merely *a* standard. There are others: a Gothic cathedral is utterly different from a Greek temple, but it is none the less a thing of beauty.

The Greeks mostly represented the human form in repose: they did not as a rule express action, and certainly not violent action. Also they did not seek primarily to express human emotions in their statues. The faces of early statues are quietly contemplative—almost emotionless. Later—in the time of Praxi-



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teles, for instance—the faces are made more expressive, but there is no complete revelation of the inner thoughts of the sculptured figures.

We must not assume from this that there is no justification for sculpture that expresses violent action, movement (as opposed to frozen movement) or all the shades of emotion, subtleties of thought and so on. We must not assume that because a reposeful statue of a Greek god is a sculptural masterpiece, a realistic and emotionally disturbing statue of a hungry old woman cannot also be a masterpiece. And because Greek art is largely impersonal and objective, we must not insist that modern art must be so. If a modern artist seeks to express his own emotions or ideas in stone, then we must judge him by his success or failure in communicating them to us, and by their worthiness. Do they reveal some aspect of life in a new and true light, and so on?

In general, it should be borne in mind that a genuine artist is a torch-bearer, one who is equipped by his genius to throw light on life and on new aspects of beauty and on human aspirations. For him life is always gleaming with significance. We ordinary people attain to something of this richness of perception only at some great emotional crisis in our lives. At other times we need the aid of the artist to sharpen our sensibilities, and to heighten our response to the world around us. And it can be said quite definitely and deliberately that every true artist has something of value to give to every person who approaches him in the right spirit. It is worth while taking pains to cultivate that spirit.

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### EXERCISES

*What is your favourite "school" of painting? Can you trace the influence of this school in the work of painters of other schools and periods?*

*Contrast the work of some modern sculptor (such as Rodin, Eric Gill or Epstein) with ancient Greek sculpture. Try to understand both points of view. In what respects do the artistic aims of the modern sculptor of your choice differ from classical aims? What points of resemblance are there? Can you define the aims of the modern? Note: This exercise should also be used in connection with painting—e.g., a comparison of a modern painter with one of the great Italian or Dutch painters of the Renaissance period.*

## HOW TO RECOGNISE ARCHITECTURE

ARCHITECTURE is more than the practical art of building: it is also a record of civilisation. The archæologist working among the ruins of some buried city finds a story in stone which the historian has missed. Our knowledge of the Egyptian, Persian and other ancient empires has been built largely round the remains of their buildings. In the first chapter you had a glimpse of some of the wonderful achievements of the builders of early civilisation.

Every country has its own architecture and every period shows some change. Man's progress may be traced in the dwellings and monuments he has set up from time to time. The subject is a vast one and of tremendous interest. Probably you may not have time or inclination to study it thoroughly in its many branches, but you should at least know something

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about the architecture of your own country. Your sightseeing will increase immeasurably in value and interest if you know a little about the various styles you may chance upon when you look at famous buildings. Here are some features to remember.

### *Saxon Architecture*

The term Saxon architecture is given to buildings set up between the seventh and eleventh centuries. Fragments of these are to be found in churches in various parts of England. The work is rather coarse. The walls are of rubble or of rag stone. Quoins—squared stones at external angles—are usually of alternate long and short stones. A marked feature of Saxon towers is the ornamentation on the walls by means of pilaster strips of stone. The arches are as a rule plain, but sometimes show massive mouldings, and are always semi-circular. The windows are somewhat small and in belfries are divided by rude balusters (small columns).

The quatrefoil—a cross with rounded ends—and the trefoil arch are features of early Saxon work.

Examples may be seen in churches in Tintagel, Repton, Monkwearmouth (Durham), Boreham (Essex), and in St. Giles's, Cambridge, St. Michael's, Oxford, and York Cathedral crypt. The most complete specimen of Saxon architecture is the church of St. Lawrence, Bradford-on-Avon, near Bath.

### *Norman Architecture*

At first buildings in the Norman style were plain and massive, the shape being cruciform with a

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central tower. The arches were for the most part semi-circular or horseshoe in shape and unmoulded. In small buildings, windows were just slits. Later, as this style developed, a good deal of ornament was used. Great columns, circular, or octagonal or clustered, divided the naves from the aisles. The windows looked like miniature doors. The doorways themselves were often deeply recessed and of great beauty. Walls were sometimes so thick that buttresses were unnecessary. The main parts of the building sometimes had flat ceilings. Sometimes the cross-framing of the timbers could be seen. In time the wooden roof gave place to the stone roof and aisles were vaulted with plain groining. Paintings, showing figures and scenes, appear in the great Norman churches, but sculptured figures were not generally used until the twelfth century.

Examples of Norman work may be seen in Winchester Cathedral, Westminster Abbey, Ely Cathedral, Rochester Cathedral, Canterbury Cathedral, Norwich Cathedral and Durham Cathedral.

### *Early English Gothic*

The first of the pointed or Gothic styles used in this country followed on the Norman style. The arches are usually lancet-shaped, i.e., pointed. Groined ceilings were commonly used, showing bosses of foliage at the intersections of the ribs. Doorways are often divided into two, deeply recessed, with much-moulded arches. Windows are nearly always long and narrow, used singly or in groups. Pillars consist of small shafts arranged round a circular pillar. Plain pillars are also used. The

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capitals are plainly moulded or ornamented with foliage, etc. The roofs are usually high and buttresses are prominent, often running right up to the top of the building. The mouldings consist of alternate delicate rounds and hollows producing the effect of light and shade. Gargoyles, often grotesque figures, are used to carry away the water from the gutters.

Examples may be seen in Westminster Abbey (apart from the Henry VII's chapel and the two west towers), Ely Cathedral, Salisbury Cathedral, Worcester Cathedral, Wells Cathedral, and the Temple Church in London.

### *Decorated Gothic*

This is a more mature style than the early English. Windows show tracery of geometrical figures, etc., and doorways are richly ornamented. Pillars are either of clustered shafts or moulded: in less ornate pillars the shafts are circular or octagonal.

Examples may be seen in St. Mary's, Oxford, Bristol Cathedral, Gloucester Cathedral, Ely Cathedral, etc.

### *Perpendicular Gothic*

The style may be distinguished by the perpendicular lines of the tracery. A notable feature is the moulding to be found over doorways, forming a spandrel, ornamented with foliage, etc. Panelling is freely used on walls. Roofs are often ornamental, showing exposed framework, carvings and figures being added.

Examples: Henry VII's Chapel in Westminster

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Abbey, Westminster Hall, Gloucester Cathedral, Winchester Cathedral. The stately castle at Hurstmonceaux is an outstanding specimen of Perpendicular domestic architecture.

It will help you to connect these styles with the periods to which they belong:

Saxon—Eleventh century. Norman—Norman Conquest to 1150. Early English—1150-1250. Decorated—1250-1350. Perpendicular—1350-1450. Tudor—1450-1550.

The dates given above are approximate only, and their uniformity is intended to aid memorisation. Roughly speaking, the first fifty years of each style form a transition period, during which the characteristics of the style are combined with those of the preceding style, and during the last fifty years each style is generally seen in its purest form.

### *Tudor and Elizabethan Architecture*

The Tudor period is one of architectural decline. Perpendicular Gothic characteristics were exaggerated, but flat-headed arches became common. A type of pointed arch each side of which is composed of a concave and a convex curve (resembling an elongated inverted S) is another distinguishing feature. Mouldings are shallow, and interiors are panelled.

During the reign of Henry VII and Henry VIII the bow-window projecting from an upper story (and called an oriel window) was widely adopted. In the same century chimneys came into more general use. Hitherto the smoke from the fires in baronial

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halls had escaped through a turret on the roof called a louver.

The Elizabethan architects seized upon the chimney and treated it in a highly fanciful way. Sometimes chimneys were clustered together. They became a prominent feature of the building.

Outside walls rose above the level of the roof and were topped with a curved or stepped battlement, etc. Bay windows at ground level were another feature of Elizabethan buildings. Ornamentation consisted mainly of the Tudor rose and strap-work, and an E-shaped ground-plan came into fashion for domestic buildings.

### *Jacobean Architecture*

The Renaissance led to a revival of the classical Roman style in European architecture. This influence was felt in England during the Elizabethan period in the design of public buildings, some of which are a curious mixture of the Gothic and Italian Renaissance styles (e.g., the chapel of Lincoln's Inn and the church of St. Catherine Cree in Leadenhall Street, London). The Jacobean or Stuart period begins with a definite classical revival initiated by Inigo Jones at the beginning of the seventeenth century. The portico of St. Paul's Church, Covent Garden, and the banqueting house in Whitehall (opposite the Horse Guards), which was all that materialised of a magnificent royal palace planned by Jones, are specimens of his work. Round-headed windows, pilasters, balustrades, obelisks and heavy cornices are features of the revived classical style. Sir Christopher Wren (1632-1723) is the culmin-

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ating point of this period. He planned a nobly designed and spacious London to take the place of the London destroyed by the Great Fire, but his plan was rejected. Nevertheless he erected (on the site of the old Gothic cathedral) his masterpiece, St. Paul's Cathedral, one of the noblest examples of post-Renaissance architecture, besides building more than fifty city churches.

### *Georgian Architecture*

There were attempts at a Gothic revival in the eighteenth century—the ineffectual towers on the western façade of Westminster Abbey are one of the relics of this—but in the main the architecture of the period following Wren was dominated by classical models—Corinthian, Ionic and Doric. Bold projecting parts and massive units were in favour. Buildings frequently suffer from heaviness. The brothers Adam introduced a flatter and more refined form of the Renaissance style; in the main, plain, solid, undistinguished looking houses, often arranged in the form of a slightly curved terrace, typify the Georgian period. The chief London buildings of the time are Somerset House, the Mansion House and the Bank of England.

### *Nineteenth-Century Architecture*

Another Gothic revival took place in the nineteenth century. Pugin and Barry, the architects of the Houses of Parliament, were its leading lights. Many dull and spiritless imitations of Gothic details were produced during the century. The classical tendency meanwhile leant definitely in the direction



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of Ancient Greek architecture, producing among other London buildings the British Museum and the National Gallery.

### EXERCISE

*Contrast the general character of Gothic architecture with that of classical architecture, and state which you consider to be the style best suited to modern conditions.*

## HOW TO LISTEN TO MUSIC

THE listener who is fond of music, but knows practically nothing about it, often envies the persons who tell him with obvious sincerity that they derive great enjoyment from a concert programme composed of what he calls "classical stuff." He can appreciate some good music if it is "tuneful," but when the construction of a work is not simple he is unable to get in touch with the composer's ideas and, without being able to explain why, finds the music unsatisfying.

The composer and the performer are taught their art; the listener usually has nothing but his taste—not always a reliable guide when self-cultivated—to help him form an opinion on the works he hears. Text-books, since they are designed for the student of music, do not help him. He wants to be shown how to listen to, not to create or express, music. Unfortunately, his education does not include any training which will meet this want.

To begin with, he should know something about the great names in music. He cannot be expected to

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know all the great performers, but he should at least be acquainted with the names of composers who have become household words. A study of the programme—it is generally possible to obtain one before the concert—will be a great aid to intelligent listening. The person whose ear is trained for melody only—he likes Handel's "Ombra mai fu" and Mendelssohn's "Spring Song"—usually has no use for Bach. He considers a Bach fugue the last word in dullness. He is astounded when a person with no more musical knowledge than he possesses himself declares that he really enjoys this composer.

### *Bach Fugues*

Bach's work is mostly contrapuntal, consisting of a number of voices which are woven together, each one running along the special path designed for it. If you look very closely into a piece of tapestry, you can see the various stitches and, maybe, trace the line which the maker followed with a certain coloured thread, but when you stand apart you will see that these threads have made a picture. Contrapuntal music is constructed in a similar way.

If you are to hear a Bach fugue, listen for the various voices. You must realise that a fugue is built round what is known as a subject—a passage which you will hear many times repeated. Each voice will come in singing this subject. Note how one voice answers another. A musical argument is being unfolded for your entertainment. Of course, there is a great deal more in a fugue than this, but when you have realised these simple points you may be eager to hear a fugue played. Several of Bach's

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fugues have been recorded for the gramophone. If you put the speed lever at "slow" you'll have a good chance to catch that little scrap of melody as it wanders in and out being taken up by first one voice, then the other.

### *Symphonies and Sonatas*

Another difficulty that troubles the ordinary listener is the apparently meaningless complexity of the symphony and the sonata. They seem to "go on and on" with just a few tuneful oases here and there. Naturally the attention wanders when the listener views a symphony in this light. There is certain knowledge that he must possess if he is to keep his bearings during a lengthy piece of this nature.

The symphony and the sonata have both been written in more or less the same "form" since Mozart's time.

They correspond in some measure to the novel in literature. Obviously one could not appreciate a novel if one could not identify and follow the actions of the main characters or recognise the different stages in the story. The listener's first need is, therefore, to discover and recognise in their various transformations the main tunes of which a sonata is built.

In its simplest form a sonata consists of three or four "movements," or self-contained sections. At least one of these—generally the first quick movement, which is sometimes preceded by a short slow introduction—is in "sonata form" (this will be described later). The sonata or symphony usually

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ends with another quick movement in "sonata form," "rondo form," or in "variation form." In between there may be two movements—a minuet or a scherzo, and a slow movement (this may be written in variation form or in some adaptation of rondo or "sonata form").

The minuet (the more sprightly scherzo is built on the same plan) is the simplest form. It consists briefly of a tune which leads to a different key from that in which it begins, but a key related to the original key. The transition is quite direct and simple. After this the composer uses parts of the original tune and works back by a more roundabout route through different keys to the original key in which he repeats the first tune without changing the key at the end. A contrasting section (called the "trio"—not to be confused with a composition for three instruments) built on the same plan follows, and then the first section is repeated. The minuet (and trio) is in fact like a sandwich in form.

A rondo is like an elaborate sandwich. First comes the principal section, then a contrasting section with a new tune in a related key, then the principal section is repeated in the original key, then comes a second contrasting section and finally the principal section is heard once more. The arrangement of the sections is therefore as follows: 1, 2, 1, 3, 1. Sometimes the first contrasting section is repeated after the third repetition of the principal section, and the movement ends with a fourth hearing of the principal section. The rondo then has the following form: 1, 2, 1, 3, 1, 2, 1.

Variation form simply consists of a tune followed

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by a number of contrasting sections built from different forms of the tune or of its accompanying harmonies. Sometimes the tune is merely elaborated. Sometimes a part of the tune is made the basis of one whole section. Sometimes the rhythm only of the tune is used in a section. Sometimes the tune reappears practically unchanged but with very different harmonies or accompanying passages.

### *Sonata Form*

The "sonata form," which is the chief feature of the sonata or symphony, is more complex. It begins with a main tune, then comes a passage leading to a new key in which we hear a second tune or set of tunes. This is called the exposition—the characters are flashed on the screen, so to speak, so that you can recognise them again. Then the action of the play begins without a break in what is called the development section. In this, parts of the first and second tunes are varied, combined, contrasted, or the complete tunes may be heard. There are frequent changes of key, and the little drama set on the stage at the beginning is "worked out" in a way that reveals the composer's skill and fancy. Towards the end of this exposition the music comes back definitely to a key closely related to the original key of the main tune: the music may even hover tantalisingly or prophetically on the doorstep, as it were, of the "home key."

At this point (without a break) comes the concluding section known as the recapitulation, in which the main tune is heard in its original key, followed by the second tune (or set of tunes), played this time

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in the same key as the main tune. The coda or "tail" of the movement varies from a short "winding up" passage to a fairly lengthy second development of one or more of the tunes heard previously.

In modern symphonies and sonatas the different movements are sometimes linked closely together by using a single main tune or snippet of melody throughout. It must be realised too that the form a symphony takes is frequently varied and elaborated by composers, but after all once one has sufficient knowledge to recognise a house one is not non-plussed when one sees an elaborate house with several wings and numbers of turrets and annexes. In the same way, a working knowledge of the simpler forms of the sonata and symphony prepares the listener for more complex forms. Needless to say, a single hearing of a symphony (or sonata) is not sufficient. One should start by concentrating upon a single composition, hearing it whenever it is played, broadcast, or better still, by buying a recorded version of it and playing it frequently on the gramophone. Mozart's popular Symphony in G minor is a good composition for the beginner to work on.

### EXERCISES

*Basing your opinions on actual compositions by Bach, Handel, Beethoven, Schumann (or other representative composers), draw up a list of the characteristics of classical and romantic music.*

*Foreigners used to say that England was an unmusical nation. Write an essay giving practical examples designed to show that the reverse is true.*

## *Chapter VIII*

### THE PROGRESS OF SCIENCE

WHEN man began to ask and answer in a purposeful and systematic way such questions as "What is this?" and "How is this done?" the world took its first steps in science.

Possibly the first science to take a definite form was astronomy. One of the first needs of an agricultural community is to know the length of the year. Unless he possessed this knowledge, the food grower could not know when to sow or plant, and the heads of communities could not decide whether their reserves of food would last until the following harvest. Priest-astronomers first worked out the lengths of the seasons by means of the moon-months, and then by marking the position of the sun at sunrise and sunset they were able to determine the longest and shortest days, and eventually to count the number of the intervening days. The orientation of Babylonian and Egyptian buildings shows that a considerable knowledge of astronomy had been accumulated at the times they were built, and we know that three thousand years before the Christian era the priests of Egypt had divided the zodiac into twelve parts and possessed a systematic knowledge of the constellations. The ancient Egyptians also had

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a practical knowledge of geometry, in fact the science is said to have been originated for the purpose of remarking the boundaries of fields that had been obliterated by the Nile floods.

### *The Cradle of Science*

With the rise of ancient Greece we see the true beginnings of science. Thales of Miletus (640-550 B.C.), one of the "Seven Wise Men," visited Egypt with other Ionians and studied the astronomy of the Egyptians and their elementary arithmetic and geometry. He is regarded as the founder of abstract geometry, and he took the first steps towards the development of algebra. Thales also speculated about the nature of matter, and decided that water was the substance from which all other substances are formed. There is a hint in his conclusions of the modern atomic theory, but Leucippus, a younger contemporary of his, is regarded as the originator of the idea that the atom (i.e., in this sense an indivisible particle varying in size and form according to the nature of the substance of which it is a part) is the basis of matter, and Leucippus' disciple Democritus (460-370 B.C.), who developed the theory, is often credited with its discovery.

The work of Thales (who also made advances in astronomy) was carried on and augmented by many of the finest minds in Ancient Greece. For many centuries the Greeks laboured at the task of evolving the laws of number and of space—a vitally important matter in the history of science, for without mathematics there could have been little or no advance in the physical sciences and modern physics would not



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exist. Pythagoras (some of whose followers taught that the earth, sun and moon were spheres) took up the torch from Thales, and his disciples carried on his great work. Mathematics and astronomy were studied together with philosophy until the time of Eudoxus (407-354 B.C.), when the two activities were separated, and scientists began to specialise in either astronomy or mathematics. Plato and Aristotle (384-322 B.C.) also made their contributions to mathematics.

Meanwhile medicine came into being as a science with the work of Hippocrates (460-377 B.C.), who freed medicine from the religious ideas with which it was associated in ancient Egypt and Greece (by the priest physicians of the god Æsculapius, for instance) and also prepared the way for biological science. The next big step was taken by Aristotle (384-322 B.C.), who is regarded as the founder of biology. His father was court-physician to Philip of Macedon in the time of Hippocrates, and Aristotle himself was tutor to Philip's son, Alexander the Great. Aristotle, besides being one of the greatest of philosophers, is an outstanding scientific figure in the ancient world. He was a pioneer in the classification of animals, in embryology, in physics, and in chemistry.

### *Scientists in Alexandria*

In the third century B.C. Alexandria became an important centre of learning, and here science flourished for some three hundred years. The Alexandrians made many important contributions to scientific knowledge. In astronomy, Aristarchus

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(310-230 B.C.) made a remarkable attempt to measure the distance of the sun from the earth and put forward the theory that the sun is stationary and that the earth (rotating at the same time on its own axis) moves round it, but this theory was not accepted at his time by other astronomers; Eratosthenes (276-196 B.C.) measured the circumference of the earth, and Hipparchus in the next generation constructed a map of the stars.

In mathematics, the Alexandrian Euclid arranged in a systematic form the geometrical knowledge of his predecessors, and perhaps made some original discoveries. Archimedes (287-212 B.C.) and his younger contemporary Apollonius of Perga (250-200 B.C.) both improved the existing system of numeration, and the latter, who was known to his followers as the "Great Mathematician," made notable advances in the handling of conic sections. Archimedes is, of course, one of the world's outstanding scientists. In addition to his discoveries in geometry, he investigated the principles of the pulley and the lever, of the centre of gravity of different geometrical bodies, of the specific gravity of bodies, and evolved a theory in connection with the stability of floating bodies. He was also a great inventor, and produced the device for raising water known as the Archimedean screw. Stories are told of the stupendous war-engines that he made to defend the city of Syracuse from the Romans, and of his discovery of the principles of specific gravity while in his bath (from which he is supposed to have leapt and run excitedly into the street while still undressed, shouting excitedly, "Eureka! I have found it!").

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The Alexandrian Ctesibius in the second century B.C., and his pupil Hero, in the first century, are remarkable chiefly for their inventions. Ctesibius devised a water pump, from which modern forcing-pumps differ little, and also an improved water clock showing the hours, days and months, and Hero produced a primitive form of theodolite for surveying and invented the first steam engine.

Medicine and chemistry also flourished at Alexandria. The physicians Herophilus and Erasistratus made advances in anatomy in the third century, when it is believed that vivisection was first practised, but the first outstanding physician after Hippocrates was Galen, in the second century A.D., who studied at Alexandria and settled in Rome. He understood the function of the nerves and muscles, and his writings summarising the existing knowledge of anatomy and physiology were the foundations on which Italian doctors of the Renaissance period were to build many centuries later.

In the time of Galen lived Ptolemy, the astronomer and geographer who drew largely upon his predecessor Hipparchus. The Ptolemaic system, according to which the earth was regarded as the centre of the solar system, was not challenged until Copernicus evolved his theory from the older theory of Aristarchus.

### *Arabian Contributions to Science*

During the early days of the Christian church science languished in the Western world. At Alexandria Pappus made advances in mathematics in the fourth century, and Diophantus (who was perhaps

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his contemporary) separated algebra from geometry. The writings of the latter were studied by the Arabs, who during the Dark Ages and the Middle Ages preserved and added considerably to the learning of the Greeks. Arab mathematicians practically invented algebra. In the ninth century the Arabs adopted from India the system of numerals (i.e., Arabic numerals) that we use today. This was perfected in the twelfth century by Muhammad-Ibn Musa, who also introduced decimal notation. The Arabs also made considerable advances in medicine: Avicenna (Ibn Sina) in the eleventh century and Averroës (Ibn Roshd) in the twelfth are important—the former wrote a text-book on medicine that was used in European Universities until the seventeenth century, and both are notable as philosophers. It would be difficult to overestimate the value of Arabic contributions to science. In physics and astronomy they made marked progress. The astronomer and mathematician Albategnius (A.D. 900) made an estimate of the length of the year that was only two and a half minutes too short. In chemistry they made remarkable strides, discovering nitric and sulphuric acid and other substances. Their chemists, Jabir in the eighth century and Rhazes in the tenth, are famous.

### *The Rise of European Science*

The dawn of modern science in Europe may be traced back to the thirteenth-century Englishman Roger Bacon, who owed much to the Greeks and the Arabs. He was the first of many great scientists to clash with the dogmas of the Church. Bacon

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advocated experimental science and mathematics, studied physics and chemistry (he is said to have discovered gunpowder), and prophesied the advent of horseless vehicles and flying machines. The alchemists (who sought to transmute base metals into gold) were active in his day, and some incidental discoveries of practical value (e.g. clear glass, leading to the making of lenses) were made in the course of their investigations, but no true scientific advances were made until the fifteenth century, when Leonardo da Vinci (1452-1519) and Copernicus (1473-1543) appear.

Leonardo, besides being a great painter and sculptor, wrote on botany, anatomy, hydraulics, engineering and mathematics, and anticipated many modern discoveries. Copernicus discarded the established conception of the solar system as described by Ptolemy, and put forward the explanation (anticipated by Aristarchus) that all the planets, including the earth, move round the sun. The Copernican system was gradually perfected by later astronomers. For a long time it was denied by the Church, since it removed the earth and consequently man from a central position to a subordinate position in the scheme of things. The chief scientific opponent of the system was Tycho Brahe (1546-1601), a Dane, who took the view (with what were very good reasons in his time) that the planets circled round the sun, and the sun together with the planets circled round the earth. Despite this error, he has a better right to the title "Father of Modern Astronomy" than Copernicus has, for his other astronomical work is of great value. His assistant Kepler (1571-1630),

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a brilliant German astronomer, worked on Brahe's materials and formulated the three famous laws of planetary motion—Kepler's Laws—one of which was that the planets move in elliptical and not in circular orbits. Kepler also anticipated Newton in connection with gravitation, but was prevented from developing his ideas owing to the inadequacy of the mathematical technique of his day. Both Kepler and Copernicus were indebted to the logarithmic table of the English mathematician Napier (1550-1617). This invention is of considerable importance to navigators and land-surveyors as well as astronomers. Napier also produced a simple calculating machine, long in use, known as "Napier's bones."

Galileo (1564-1642) supported the Copernican system. This act brought him into conflict with the Catholic Church, and he was forced to abjure his scientific belief. He was the first astronomer to use the telescope—a Dutch invention of about 1600, which he improved—and by its aid he discovered sun spots, the moons of Jupiter, and revealed that the Milky Way is composed of stars. Galileo's chief work is in the science of dynamics (i.e., the science of forces that are not in equilibrium), which he founded. The story is told of how he dropped two weights simultaneously from the Leaning Tower of Pisa in order to disprove the established view that heavy objects fall more rapidly than lighter objects.

Kepler's Laws and Galileo's laws of motion paved the way to Newton's great discovery of the mechanics of the solar system (Newton was born in the year of Galileo's death, 1642, and died in 1727). Newton was also indebted to the mathematicians who pre-

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ceded him. Descartes (1550-1617), one of the greatest of mathematicians (who resumed, by the way, a problem that Pappus abandoned thirteen centuries before), produced the new and epoch-making method of analytical geometry. He was followed by Fermat, John Wallis and others whose work in algebra made Newton's discovery possible. Descartes also made great strides in physics; he broke up white light into its prismatic colours (a feat for which the credit is often wrongly given to Newton), and his theories of light and heat are nearer to modern theories than are those of Newton. (Light was widely studied at this time: its velocity was determined by Roemer in 1676, and Huygens—inventor of the pendulum clock—produced the wave theory of light.)

Newton showed his greatness as a mathematician by formulating (about 1666) the principles of the transcendental calculus—a branch of mathematics that is of immense importance in physical research—but he did not publish his treatise until 1693, and in the meantime the philosopher Leibnitz (1646-1716) made the same discovery independently of Newton before 1677. The problem of who should have the honour of the discovery was debated bitterly by the supporters of the two men. Leibnitz's method proved superior to Newton's and had a bigger influence on the evolution of mathematics, but Newton, of course, employed his own method in making his supreme discovery—the universal principle of gravitation.

Mathematics may be described as the chief tool of science, but many other important tools were made in the sixteenth and seventeenth centuries—the

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telescope, already mentioned; the microscope, produced by the Dutchman Leeuwenhoek (1632-1723); the micrometer, introduced by Gascoigne in 1639; the thermometer, which Galileo anticipated and which was developed by Renaldini and others (later, of course, Fahrenheit perfected it); and the barometer, invented in 1642 by Galileo's successor Torricelli, who showed the existence of atmospheric pressure. Guericke and Boyle, in this century, invented the air pump, and the latter produced his famous law showing that the bulk of compressed air bears a fixed relationship to the pressure to which it is subjected. Papin, a French doctor, applied the discoveries of Boyle and others to practical ends and produced a form of steam engine, the atmospheric steam engine, which was perfected and developed by Newcomen, Brindley and Smeaton. This engine was used in mines for pumping water and lifting coal until Leupold's steam engine (invented in 1725) was improved by James Watt in 1769.

By this time remarkable advances had been made in biology. Anatomy, resumed in a scientific spirit by the Belgian Vesalius (1514-64), was revolutionised by Harvey (1578-1657), who demonstrated the circulation of the blood (others before him had hinted at this). In the hands of Leeuwenhoek and Swammerdam the microscope revealed the existence of bacteria and other microscopic organisms, and enabled the seventeenth century to learn something of the minute organs of insects.

### *Chemistry Becomes a Science*

In the eighteenth century there was still greater



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activity. Chemistry came into existence as a systematised science. The credit for this is given primarily to Lavoisier (1743-94), who was executed during the French Revolution when he was at the height of his powers. Lavoisier built up an organised science from the work of his predecessors and contemporaries, improved the methods of chemical research, made many valuable experiments and outlined the principle of the "conservation of matter." According to this principle nothing is lost in any chemical operation: if one substance loses weight there is an exactly corresponding gain in the weight of the other substances concerned in the operation. In other words, the total weight of all the materials involved in a chemical process does not change.

Much of the pioneer work at this time was done by the English chemists, whose discoveries helped to overthrow the false phlogiston theory (an old idea developed in the seventeenth century by the Germans Becher and Stahl). Briefly it amounted to this: when a substance was burnt a special combustible material, phlogiston, was emitted; thus all combustible substances were linked together by the fact that they consisted partly of phlogiston, so in spite of its fallacy the theory served a good purpose in giving men a more unified idea of chemistry. (It may be noted here that energy given off in the form of heat corresponds in some measure to phlogiston, but the supporters of the theory had no inkling of this because they thought of phlogiston as a material thing.)

The facts which were to give the death-blow to this theory were already partly known. For instance,

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the Arabs had discovered six hundred years earlier that a metal gains in weight when it is calcined, whereas if phlogiston were emitted from it, it should lose in weight.

However, in England an important new step was taken by Black (1728-99), who discovered that when lime is burned to make quicklime a gas (carbonic acid gas) is emitted, and he showed that it is due to the absence of this gas that quicklime has caustic properties. (Black also made valuable contributions to physics by discovering specific heat and latent heat—Watt quickly made use of his researches.) Priestley continued the search for other gases and produced oxygen (the name was given to this gas by Lavoisier) by heating oxide of mercury (i e., calcined mercury). Scheele (a German chemist who first produced prussian blue, prussic acid and chlorine gas) arrived at the same results independently, and also succeeded in showing that the atmosphere contains oxygen and nitrogen. Lavoisier seized upon these researches and was able to show that during the process of burning a substance combines with oxygen from the surrounding air and emits carbonic acid gas. About this time Cavendish discovered hydrogen. He burned this gas with oxygen and produced water—thus demonstrating the composition of water, hitherto thought to be an “element”—and there is reason to believe that he found the rare gas argon, in the atmosphere. (Argon was definitely discovered by Rayleigh and Ramsay in 1894.) Another important contribution that Cavendish made to his science was the method of weighing and measuring systematically throughout a series of experiments, and he is

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remembered too as the first man to weigh the world.

In biology, the eighteenth century contains the names of Linnæus, the Swedish naturalist, who first classified plants and animals in orderly groups ; the French naturalist Buffon, and Goethe the poet, who spread the idea that animals and plants were not created abruptly but had developed by a gradual process of evolution; Cuvier, the founder of comparative anatomy, and one of the first biologists to study fossils of extinct animals (Leonardo da Vinci was a pioneer in this work); Lamarck, the founder of invertebrate zoology and a precursor of Darwin in explaining the origin of species; and Jenner (1749-1823), who discovered vaccination. Lavoisier played an important part in the development of botany by showing that life involves a form of combustion or oxydisation.

The study of electricity and magnetism also first took a definite shape in the eighteenth century. Dr. Gilbert, Queen Elizabeth's court physician, had made a beginning with a number of experiments (he was one of the first to carry out Roger Bacon's suggestions), and he had shown that the earth is an immense magnet. Also Otto Von Guericke of Magdeburg produced electrical apparatus about 1670, but for the most part this branch of science was neglected until the time of Hawksbee, Franklin (who experimented with lightning, and studied electricity produced by friction), and Volta and Galvani—both of whom devised methods of producing electricity by the chemical action of acids on metals in their inventions, the voltaic pile and the galvanic battery.

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Acoustics, founded by the French mathematician Sauveur (1658-1716), progressed during the eighteenth century in the hands of Hawksbee, Chladni (who made a remarkable advance) and D'Alembert. The latter, together with Euler, Clairaut, and later, Lagrange, worked at various important problems connected with Newton's theory of the solar system. (The Newtonian theory as its founder left it was far from being complete.) The work of these men was co-ordinated by Laplace, who also advanced a scientific explanation of the origin of the solar system. Astronomical observations of the first importance were made in the late seventeenth and early eighteenth centuries by Halley, who is remembered for his study of comets and of the changes in the position of the "fixed" stars, and by Herschel (1738-1822), who discovered Uranus, the double stars, and catalogued the nebulae.

### *The Atomic Theory*

One of the most striking features of the nineteenth century is the widespread practical application of scientific knowledge. The steam railway, the electric telegraph, electric lighting and many other marvels of applied science were introduced. At the same time investigations in pure science went rapidly forward. About the beginning of the century Dalton developed the atomic theory in connection with chemistry—this was one of the first important results of Lavoisier's work. He showed how the atoms of elements combine to form the molecules of compound substances. Dalton was led to make his atomic researches by his work on the expansion and

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evaporation of gases that resulted in "Dalton's Laws." Since his day chemists have given much attention to the atomic theory, and it has been the means of linking chemistry, physics and astronomy closely together.

At the present time the actuality of atoms and molecules is unquestioned, and we now have definite ideas about the composition of the atom (it was visualised by Lord Rutherford and others as an incredibly tiny solar system consisting of electrons or particles of negative electricity whirling round a positively charged nucleus) which suggest that all matter is fundamentally of an electrical nature. Among the chief investigators who have built up our present knowledge of the subject are Sir William Crookes (who experimented with electrons in his vacuum tubes without grasping their significance), Röntgen (discoverer of X-rays), Madame Curie (the discoverer of radium in 1898) and her husband, Sir William Ramsay, Professor Soddy, Moseley, Sir J. J. Thomson (discoverer of the electron), Lord Rutherford, Sir William Bragg, Fowler, Sir Arthur Eddington, Max Planck and Niels Bohr. Recent investigations have given rise to a purely mathematical conception of the atom which can only be represented by mathematical symbols.

### *Classifying the Elements*

In connection with the atom may be mentioned the discovery of Newlands and Mendeléef (1834-1907) of the relationship of the chemical elements. The last-named, a great Russian chemist, arranged the elements according to their atomic weight,

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running in a series from hydrogen, the lightest element, to uranium, the heaviest. When thus arranged the elements fall into groups having similar properties. Mendeléef was able to predict the atomic weights and the special properties of the undiscovered elements that caused the gaps in his table. Some of these elements have since been discovered.

The significance of Mendeléef's work was revealed by Moseley, a young British scientist who was killed in the World War. Moseley showed that Mendeléef's arrangement of the elements according to the weight of their atoms was also an arrangement of them according to the number of electrons in their atoms. The hydrogen atom contains one rotating electron, and the number of electrons increases (and the structure of the atom becomes more complex) in successive elements until we reach uranium, the atom of which contains ninety-two electrons. Soddy and Aston have also made important contributions to this subject.

### *Growth of Chemistry*

When the nineteenth century opened other great chemists were at work. Sir Humphry Davy, inventor of the miner's safety lamp, also built on the systematic foundations laid by Lavoisier and discovered the elements potassium, barium, calcium, sodium and magnesium. He took an important step in recognising the use of electricity for the purpose of resolving chemical compounds into the elements of which they are composed. Since Davy some of the most striking discoveries in chemistry have been made by Sir William Ramsay—discoverer of helium

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and other gases and an investigator of radio-action. Following Davy, Berzelius threw light on the laws of chemical combinations, and Wohler produced in his laboratory (for the first time in scientific history) an organic substance from inorganic substances.

The great German chemist Liebig (1803-73) must be also mentioned for his work in demonstrating the Circulation of Matter—the perpetually changing partnerships of the chemical elements.

Apart from biology, probably the greatest figure of the century is Michael Faraday (1791-1867), who was launched on his scientific career by Sir Humphry Davy. Faraday, who has been called the “prince of experimenters,” made many valuable discoveries but he is renowned chiefly for his work on electromagnetic induction, which is the germ from which modern electrical triumphs have developed. His contemporaries Oerstad, Ampère, Arago, Ohm, Joule, the American Joseph Henry and others all made outstanding contributions to electrical science. Clerk-Maxwell gave Faraday’s theories a mathematical form (for Faraday was not a mathematician), and Lord Rayleigh, Lord Kelvin and John Hopkinson were among those who developed these theories on scientific and practical lines.

Clerk-Maxwell, working on an idea of Faraday’s, made a vital contribution to physics with his electromagnetic theory of light, which was confirmed by Hertz (one of the originators of wireless telegraphy), who demonstrated that light consists of electrical vibrations. In another branch of physics, the study of heat was advanced by Joule, Helmholtz, Carnot and Lord Kelvin.

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A sensational event in astronomy was the discovery of the planet Neptune by mathematical methods. Adams and Leverrier (a celebrated French mathematician), working independently, showed by calculations based on the irregular movements of the planet Uranus that there must be another planet beyond it in the solar system. Another remarkable feat of the last century was the use of the spectro-scope to determine what the stars, the nebulae and the comets are made of. An interesting illustration of this work is Sir Norman Lockyer's discovery in 1868 of an unknown gas (named by him helium) on the sun many years before it was found (by Ramsay) to be present on the earth. Hitherto the solar system has been the chief study of astronomers, but from the end of the nineteenth century they have turned their attention mainly to the universe beyond. Sir James Jeans and Sir Arthur Eddington are prominent in this greater field of research, and the popular books of the former should be consulted.

### *The Work of Einstein*

The progress in nineteenth-century mathematics made by such men as Gauss, Lobatchevsky, Minkovsky and Riemann, opened up a new realm of possibilities that bore fruit in the work of Einstein, who was able to show that Euclid's geometry (on which Newton based his theory of the universe) does not apply to actual space. Einstein has shown that space is curved (the new mathematics enabled him to cope with this conception), that space and time are, so to speak, merged together, that gravity is a property of space and not (as Newton held) a force. Einstein's



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theories are purely mathematical, but his view of the curvature of space has been confirmed strikingly in a practical way by the observation (during solar eclipses) of the curved path taken by starlight passing near the sun. The relativity theory of Einstein is too involved to describe in a brief survey. Lucid accounts of it are given in *Relativity*, by Professor James Rice (Benn's Sixpenny Library) and *The Universe*, by Frank Allen. The theory is regarded as man's supreme achievement in mathematical science.

### *Darwinism*

The last great chapter of knowledge opened by the nineteenth-century scientists is in biology, and the outstanding event is the evolution theory of Charles Darwin (1809-82) and his fellow-worker Alfred Russel Wallace. The general idea of evolution had been current in the thinking world since the days of ancient Greece. It had begun to take a more definite form in the eighteenth century, and in the early nineteenth century various investigators had been accumulating the knowledge needed to build a scientific evolution theory—Cuvier collected evidence showing the descent of hoofed animals from their primitive ancestors, but he did not commit himself to a definite opinion; Pander and Baer (1792-1876) studied the forms assumed by living things in the embryonic stage. The latter showed that the early stages in the development of an individual organism are in some measure a repetition in miniature of the racial history of the group to which

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the organism belongs—its organs, for instance, pass through primitive stages of development that have a parallel in the form of the organs of the remote ancestors of the organism.

Darwin found a theory of the origin of the diverse forms of life on the earth that fitted the available facts. In 1845 he published the first hint of his theory, in 1859 his *Origin of Species* appeared, and in 1871 he produced *The Descent of Man*, which showed that mankind originated in the same way as the rest of living things. Darwinism caused a tremendous stir and was for a long time violently opposed. One of its most powerful supporters was T. H. Huxley.

True to its spirit Darwinism has itself evolved since Darwin's day. It raised all sorts of questions that demanded fuller explanation. There was the question of heredity, which was brilliantly investigated by the Silesian priest Gregor Mendel (1822-84). Mendelism was ignored for many years. Eventually it was confirmed and elaborated by Professor Bateso, none of the leading modern evolutionists. Then Weissmann (1834-1914), working on germ-cells, produced a sound theory of the means by which characteristics of parents are passed on to their offspring. (Schleiden and Schwann had previously produced the cell theory, showing among other things that organisms are composed of living cells—a vitally important step in biology.)

As a result of many remarkable discoveries in recent years the evolution theory has been modified and greatly amplified, but it is remarkable how much of Darwin's original work still holds good. Especi-

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ally notable is the natural selection theory of Darwin and Wallace.

In other branches of biology more directly connected with the immediate welfare of mankind such men as Claude Bernard (1813-78) investigated the functions of organs and the principles of nutrition (i.e., metabolism); Pasteur and a long line of followers engaged in the hunt for microbes and discovered effective means of waging war against them, bringing many deadly diseases (anthrax, rabies, etc.) under control. (Earlier in the century Schwann had shown that microscopic living organisms were responsible for fermentation and putrefaction—thus resuming the line of study opened up by Leeuwenhoek two centuries before.) Antiseptic surgery, one of the most important developments in medicine, was introduced in 1887 by Lord Lister, as a result of Pasteur's discoveries, and another great aid to the doctor and the patient came in the form of various anæsthetics that were put into general use in Europe for the first time during the nineteenth century.

### EXERCISES

*Select the five most important scientific discoveries and give the reasons for your choice.*

*What branch of science has made the most valuable contributions to human welfare?*

*What do you know about the atom, alchemy, the Ptolemaic system, the classification of the elements, the beginnings of biology, radium, the nature of space, the spectroscope, hydrogen, ultra-violet radiation and cosmic rays?*

## *Chapter IX*

### MAKERS OF HISTORY

HISTORY is built round great men and their influence on other people. The biographies of the great are close-up views of life that help to make clear the reasons behind events that would remain hidden if we merely studied them in a general way. The study of their achievements is in itself inspiring and illuminating, for they are the stuff of which history is made.

#### *JULIUS CÆSAR (102-44 B.C.)*

No figure in ancient history is more powerful than Gaius Julius Cæsar. He was a brilliant statesman, general, politician and man of letters. At an early period of his career Sulla, who was then dictator, ordered him to put away his wife, but Cæsar refused and had to leave Rome. He returned to the city in 74 B.C. and became pontiff and military tribunal. The Romans, impressed by his ability, gave him great power. He held the ædileship with Bibulus, and in 63 B.C. was elected Pontifex Maximus. In 62 B.C. he was made prætor, and two years later he was elected Consul. From 59 B.C. until his death Cæsar was in effect dictator of the Republic. His first great campaign opened in Gaul in 58 B.C.

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In 55 B.C. he made a raid on Britain, being compelled to retreat owing to the strong resistance of the islanders. Probably he had no definite thought of conquest then but merely wanted to find out what the country was like. He returned in 54 B.C. and crossed the Thames, but again was forced to retire. The Gauls, whom Cæsar had conquered, made several bids for their freedom but Cæsar subdued them, and eventually won them over by his mild treatment of the insurgent tribes. Cæsar was murdered in 44 B.C. at a meeting of the Senate, wounded from head to foot by the daggers of men who hated him and felt he had enslaved the people. His "Commentaries"—reports of his campaigns—are a literary masterpiece.

### *AUGUSTUS* (63 B.C.-A.D. 14)

Gaius Julius Cæsar Octavianus was the first Emperor of Rome, and was given the title of Augustus. Julius Cæsar, his uncle, recognised his talents, and adopted him as his son. While he was studying eloquence at Apollonia Octavian heard that Cæsar had been murdered. He went to Italy and was proclaimed his uncle's heir and avenger. Antony held great power in Rome and at first refused to acknowledge Octavian's demands for the inheritance left to him by Cæsar. The rivalry and hatred of the two men was an open secret, and Octavian was accused of wishing to have Antony murdered. Octavian proceeded against Antony but was reconciled to him and formed with him and Lepidus the second triumvirate, the Empire being divided among them. When Antony lived luxuri-

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ously and became engaged in his intrigues with Cleopatra, Octavian set himself to gain supreme power. He declared war against the Queen of Egypt and won the battle of Actium (31 B.C.), becoming master of the Roman world after Antony and Cleopatra killed themselves. Literature flourished under his encouragement. Horace, Virgil, Livy and other famous writers benefited by his patronage.

### *CHARLEMAGNE (742-814)*

Charles the Great, King of the Franks and, later, Emperor of the West, was born in 742. He made war on the Saxons, who were heathens, making Christianity, which he argued at the point of the sword, a cloak for his plan of conquest. Not until thirty-two years had passed and their country was almost a desert did he succeed in subduing them. In 774 Charlemagne made himself king of the Lombards, being crowned with the famous Iron Crown—a circlet of gold containing, it is said, an iron nail from the True Cross. After various wars he was proclaimed emperor by Pope Leo III in 800 and lived a comparatively quiet life till the end of his reign. He was the friend of scholars and musicians.

### *JOAN OF ARC (1412-31)*

The Maid of Orleans was a peasant girl of Domremy, near Nancy, France. A great part of the country had fallen under the dominance of England, and when Orleans was besieged, Joan sought out Charles, the Dauphin, and asserted that heavenly voices had commanded her to save Orleans and to have Charles crowned at Rheims. Divines and men

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of Parliament examined her, believing her to be possessed, but at length she was made head of the army and inspired the troops with her extraordinary enthusiasm and courage. Orleans was saved and Charles entered Rheims triumphantly. The Burgundians (allies of England) besieged Compiègne, and Joan was captured and sold to the English. She was brought to trial at the instigation of her own countrymen, and Pierre Cauchon, Bishop of Beauvais, succeeded in bringing about her condemnation as a heretic and sorceress. She was burnt at the stake in 1431, dying with undaunted courage.

### *GIROLAMO SAVONAROLA* (1452-98)

The famous Italian reformer Savonarola is one of the most striking figures of the Middle Ages. It was intended that he should be a physician, but the corruption of society at that time caused him to enter a monastery at Bologna. At first his preaching attracted little attention, but when his talents were recognised the Florentines flocked in crowds to hear him make his passionate appeals for reform in the Church. His prophecies of desolation to come alarmed and excited those who believed in him and caused others to declare him to be an impostor. When later the opportunity came for him to take part in the political life of Florence, he attacked the government and the notorious Pope Alexander VI, who excommunicated him. Savonarola continued to preach in spite of the papal command. He drew upon himself the enmity of the monks and was denounced publicly as a heretic. He was taken prisoner, thrown into prison and tried for heresy and sedition.

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After undergoing terrible torture, he was hanged and burned with his adherents, in the presence of a large crowd, some of whom looked upon him as a saint.

### *THOMAS WOLSEY* (1475-1530)

Wolsey is said to have been the son of an Ipswich butcher. He became a fellow of Magdalen College, and in 1500 was presented with the living of Lymington. Henry VII made him Dean of Lincoln and his skill in diplomacy earned rapid advancement for him after Henry VIII's accession. Many dignities were bestowed on him. In 1515 he was created Lord Chancellor, and three years later Pope Leo X made him Cardinal-legate. Favoured by the Emperors Charles V and Francis I, and invaluable to the young King Henry VIII, he "reigned a long season" as Cavendish, his biographer, tells us—"in great honour, triumph and glory." His attempts to secure his own elevation to the papacy failed. His foreign policy was masterly, and he succeeded in making England a big influence in European affairs. Because Wolsey was unable to induce the Pope to say that his marriage with Katherine of Aragon was invalid, Henry deprived him of nearly all his offices. Summoned to London to be tried for treason, Wolsey became very ill and died, broken-hearted, on the way at Leicester Abbey.

### *CHARLES V* (1500-58)

Charles V, Emperor of Germany, is a prominent figure in a brilliant age that saw Francis I on the throne of France and Henry VIII on the throne of



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England. He was ruler of Spain, the Netherlands, Sicily, Naples and the New World. He quarrelled with France over the possession of territory in Italy and was attacked by the Turks. For ten years war was waged until Charles was triumphant in Italy. Germany at that time was the centre of the revolt against the papacy, and Charles had to grapple with grave internal trouble in Germany caused by his princes, who were making a bid for supremacy under the cloak of religious scruples. The religious war broke out in 1546. The next year Francis I died and Charles arrived at an insecure peace. The war was renewed in 1552, and the Emperor narrowly escaped being captured at Innsbruck. Weary of war and disillusioned about earthly power, he abdicated, and his realm was divided between his son Philip and his brother Ferdinand. His health and his diet occupied his thoughts continually. He died in 1558, and with his death the greatness of the Holy Roman Empire began to decline.

### *WILLIAM PITT (1708-78)*

Chatham, one of the most illustrious of English statesmen, began his career in Parliament as Walpole's opponent. He became Secretary of State in 1756, was dismissed and reappointed the following year. It was his ambition to restore the glory of England, which had declined owing to various disasters, and he set himself to destroy the power of France in America and India. His plans were checked when George III, prejudiced against him by the Earl of Bute, came to the throne and he was forced to resign. The King found it necessary to

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call on him to form a new ministry in 1766, and he was created Earl of Chatham. He worked strenuously to prevent the breakaway of the American colonies from Britain, but his warnings were disregarded and in 1776 those colonies—which became the United States—declared their independence. He died soon after, making a speech, when ill, against the ministerial attitude towards America.

### *NAPOLEON BONAPARTE (1769-1821)*

Napoleon is the most fascinating and striking figure in modern history. No man has shown greater military genius or worked with more ruthless determination to achieve his ambition. He was born in Corsica in 1769. At ten years of age he was sent to a military school, and earned among his companions the reputation of being morose. About the time when the French Revolution was beginning, he received a commission in an artillery regiment and won his first military victory at Toulon, which was captured from the Royalists through his strategy. He was entrusted with the task of suppressing the risings in Paris in 1795, and a week after his marriage with Josephine Beauharnais in the following year was given command of the army in Italy. So great was his success against the Sardinians and the Austrians that Paris held festivals in his honour when he returned to his own country.

With the conquest of India in view, he invaded Egypt, took Alexandria and won the battle of the Pyramids (July 21st, 1798). Nelson found his fleet in Aboukir Bay and completely upset his plans. He then crossed into Syria, and after trying in vain

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to capture Acre, held by the Turkish guns and Sir Sidney Smith, he returned to Egypt, defeating the Turks at Aboukir (July 25th, 1799). The political crisis in France drew him home. A new constitution was set up and Napoleon was made First Consul, and after a number of military triumphs assumed the title of Emperor of the French in 1804. He conquered Italy and had his son crowned King of Rome. He swept down upon Austria, depriving her of most of her territory, made his brother Joseph King of Spain, and invaded Russia in 1812. The Battle of Borodino was fought, Moscow was burnt and Napoleon had to retreat, losing nearly the whole of his army. The Prussians rose against him, the French armies were beaten and Napoleon abdicated, Louis XVIII assuming the Crown. A year later Napoleon escaped from Elba, where he had been exiled, once more challenged his enemies, and was finally defeated at Waterloo. He was sent by the English to St. Helena, where he died in 1821.

### *HORATIO NELSON (1758-1805)*

The man who prevented Napoleon from becoming master of Europe was born eleven years before the great Corsican. He entered the Navy when twelve years old and in 1773 joined an expedition to the Arctic Seas. When war with the French Republic began he was given command of the *Agamemnon* and took part in the siege of Bastia (1794). In the same year he helped to capture Calvi, where he lost an eye. Later at the attack on Santa Cruz he lost an arm. He was sent to the Mediterranean to watch the fleet that conveyed Napoleon to

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Egypt, but missed it in the fog. He found it later in Aboukir Bay, near Alexandria, and destroyed it (1798). When at Naples he formed an attachment with Lady Hamilton, which brought about his separation from his wife. In 1801, as second in command to Sir Hyde Parker, he effected the destruction of the Danish fleet at Copenhagen, afterwards being created a viscount. For nearly two years he kept the French fleet held up in Toulon, following it to the West Indies when it escaped and, engaging it in battle off the Cape of Trafalgar, won the magnificent victory which cost him his life.

### *THE DUKE OF WELLINGTON* (1769-1852)

Arthur Wellesley, Duke of Wellington, was born in the same year as Napoleon. He went to India, where he gave proof of his great military capacities. When Spain and Portugal resisted the dominance of Napoleon, Britain went to their support and Wellesley was given command, and for his triumphs in the Peninsula, where he was faced by Napoleon's most skilled marshals, was made a duke. When Napoleon escaped from Elba, Wellington took command of the army assembled in the Netherlands to oppose him. Wellington took up his stand at Waterloo, and with the help of the Prussians under Blücher shattered Napoleon's army for ever. When peace came Wellington resumed his political career. He accepted the premiership in 1828, bringing public wrath on himself by his opposition to Parliamentary reform (1832). But he died beloved by the nation, having proved his wisdom and high integrity.

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### *ABRAHAM LINCOLN* (1809-65)

The greatest of the Presidents of the United States was born in 1809. He spent his youth in Indiana, living in a log cabin, and had gained practically no learning before he came of age, when he accepted a post as a clerk in a country store. He bought a few books and set about getting some education. In 1834 he was elected as one of the members of the Illinois legislature. He studied law and two years later was admitted to the bar. He became a most influential public speaker, and threw himself heart and soul into the struggle centring on the question of slavery. After a most strenuous political campaign he was elected President (1861). The slave-owning states in the South seceded from the Union and civil war broke out. Lincoln worked tirelessly to save the Union. The war came to an end in 1865, and not only was the Union saved but slavery was abolished. Lincoln had accomplished his great task. He died in the same year from an assassin's bullet fired at him when he was in a theatre in Washington.

### EXERCISES

*Choose another "maker of history," and write an outline of his (or her) life, together with a description of his influence on the events of his time.*

*As a test of your ingenuity and your knowledge of history work out in some detail the probable course of history if some important historical event in the life of a "maker of history" had turned out differently—e.g., if Joan of Arc had supported the English, or if the North had been defeated in the American Civil War.*

## *Chapter X*

### SOME FAMOUS THINKERS

IT is in philosophy that we see the highest manifestations of the human mind. Some of the chief systems of thought may seem hopelessly abstruse and out of touch with the facts of everyday life, but actually the influence of the great philosophies on practical matters has been far-reaching—though that is not their main justification. They have coloured man's attitude towards life, modified his laws, reshaped his social institutions, given direction and form to his sciences and vitality to his arts. The incalculable influence of Aristotle on the outlook of Europe during the Middle Ages and the effect of Rousseau's ideas in inspiring the French Revolution with its numerous and still-continuing repercussions are two examples of this. Obviously we must know something of the great philosophers if we would understand the forces at work in the world in which we live.

#### *SOCRATES*

The "wisest, justest and best" of the men of his time is Plato's description of Socrates. Yet this great and original philosopher had no formal education, and no real philosophical training. He was

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simply a natural thinker, whose mind sought instinctively the roots of things. The son of an Athenian sculptor, Socrates was born about 469 B.C., shortly before Pericles rose to power, and he therefore lived during the greatest period in Greek history. For a time he worked as a sculptor, and he fought with great courage and showed remarkable powers of endurance in the Peloponnesian War.

It was not until he reached the age of forty that Socrates became a public character. He spent his days in the public places of Athens conversing and arguing with all who chose to pass words with him—the fashionable philosophers, poor men, rich men, young and old. We can visualise him from the descriptions of his contemporaries as a short, sturdy, barefooted figure (he would even walk on stony ground without sandals), grotesquely plain of feature and none too tidily dressed. He would talk on any subject affecting human life—the responsibilities of citizenship, the problems of state, justice, piety, beauty. His main concern was to arrive at true knowledge—knowledge he regarded as the only virtue. Without true knowledge, no man (he maintained) could act rightly.

The famous “Socratic method” which he adopted in his discussions was simply to ask penetrating questions with a view to finding out exactly what were the ideas on which others based their thoughts. A rival philosopher or a disciple of his might be holding forth on truth or right-living. Socrates would proceed to question him as to what he meant by truth or right-living. Sometimes this alone would reveal the superficial nature of the other man’s

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ideas. Sometimes, when an apparently satisfactory definition was given Socrates would seize upon some weak or non-essential point in it or some point that had been omitted and proceed to show that the definition was in reality a very poor one. And so the process of cross-examination, of question and answer, would go on, leading the other man to some definite and tenable conclusions about his ideas, or pointing out a fresh line of thought or more often exposing him sooner or later as a wind-bag. His mission was thus a simple one—to clear away the mists in men's minds, and make them think clearly and honestly—and at the close of his life, during his trial, he described himself as one who gave up his own fortune and voluntarily embraced poverty for the sake of the improvement of his fellow citizens.

It was inevitable that Socrates should gather round him many followers. Some were brilliant young men whom he stimulated to apply his method of thinking to intellectual subjects that lay outside his own range of interests. The greatest of these disciples is Plato, who incidentally acted the part of Boswell to Socrates' Dr. Johnson, and has left us vivid pictures of his master in numerous dialogues. Some of Socrates' followers, however, were undesirable characters (for he was no distinguisher of persons), and his extreme scepticism—the doubting of all ideals and standards for which he could find no definite foundation—worked havoc with their mental outlook. Thus it was that he was charged by the State with corrupting Athenian youths and neglecting to worship the recognised gods—the penalty for which was death. The courage and



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steadfastness with which the philosopher faced his accusers are exactly what one would have expected from him. He stood by his guns and so the Athenian jury condemned him to death. The custom in Athens then was for a condemned person to take poison, and accordingly Socrates drank a draught of hemlock a few weeks after the trial and talked calmly and wisely with his friends until death came. Socrates left no writings, he taught only by word of mouth, but there is no gainsaying his immense influence on the thought of mankind since his day, especially upon the methods of formulating knowledge.

### *ARISTOTLE*

The universal mind that can take all knowledge in its stride is given to few men. Aristotle (384-322 B.C.) had such a mind. He was the son of a physician at the Macedonian court, and as a young man he came to Athens to study under Plato in the Academy; but whereas his teacher was concerned with abstract ideas, Aristotle was more concerned with facts—with the results of observation and experience. In middle life Aristotle became tutor to Alexander, the son of Philip of Macedon—a youth who was later to shake the world with his conquests. It seems likely that not a little of Alexander's subsequent greatness was due to the scientific outlook and the orderly methods of thinking imparted by the tutor for whom he conceived a lifelong affection and respect.

At the outbreak of the Persian War, Aristotle returned to Athens, where he established his school

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of philosophy, the Lyceum. From his habit of walking about with his pupils while he gave them instruction, the term "peripatetic" (i.e., walking) has been applied to his philosophy. This period was the most fruitful in his life; it lasted for twelve years, and then, after the death of Alexander, his opponents conspired against him and he was forced to leave Athens. He died at Chalcis a year later.

One of Aristotle's great achievements was to systematise and unify knowledge. In his writings, many of which have been lost, he assembled in an orderly fashion all the vital knowledge of his day, and added much that was entirely his own. His conception of sociology is sound and spacious, for it was based on practical experience (he took, for instance, an important part in the civic life of his native city, Stagira). As a specimen of his sociological views take his liberal-minded advocacy of State-aid for the poor. While condemning promiscuous and purposeless charity, he maintains that the poor should be helped from the public revenues to make a fresh start in life. His view is that, as a rule, people are poor through no fault of their own and with properly organised practical assistance they will prove their worth.

In science Aristotle did his most striking work, and in one branch of science, biology, he is a great pioneer. With Alexander's support Aristotle was able to employ many hundreds of researchers in Asia and other parts of the known world to send him reports for his natural history. After making extensive comparisons he was able to anticipate modern methods of classifying animals. He investigated such

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matters as the development of the chick's heart in an egg and differences between various types of tissues in the bodies of animals. Many centuries were to pass before men awakened to the significance of these and other researches.

For some time after his death Aristotle's writings were lost. Rome knew them but did not fully appreciate them. During the Dark Ages the Arabs translated and preserved much of his work, but they made additions to it from Oriental philosophy; and finally, during the Renaissance, translations from the Arabic reached the scholars of the Church, who used a distorted form of the Aristotelian philosophy as the basis of their teachings. The world has since learned to interpret Aristotle aright, and we know that so far from being opposed to the scientific advances which the Church on his authority resisted, he is the great forerunner of modern science.

### *DESCARTES*

If any one man could be given the credit for the feat of restoring reasoned thinking to its rightful place in man's mental make-up, René Descartes (1596-1650) is that man. He was a timid, not to say cowardly, man (he feared to publish his treatise on astronomy when he heard of Galileo's persecution and he always spoke evasively about the subject), but he was a bold thinker. Ill-health in childhood no doubt handicapped him. He afterwards said that he derived from his schooling only a knowledge of his own ignorance and a contempt for existing philosophies. As a young man he decided to travel, fought as a soldier for a time in the Thirty Years' War, and

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finally settled in Amsterdam. In the peaceful setting of Protestant Holland he produced his greatest philosophical work, the *Discourse on Method*, and made many remarkable contributions to science. At the age of forty-five he was one of the best-known thinkers in Europe. After ten further uneventful years of work he unwisely accepted an invitation of Queen Christina of Sweden to visit her at Stockholm, and succumbed to the effects of a Scandinavian winter.

In philosophy Descartes started off with the failure of existing philosophies to provide definite grounds for knowledge. If you held one theory and your friend held another, he could disprove yours with just as good reasons as you could disprove his; his proofs of his theory contained no less probability than did your proofs of your theory. Looking around him Descartes saw that the one branch of knowledge that did not suffer from this disadvantage was mathematics (he was an expert mathematician). Why not apply the methods of mathematics to philosophy? Now in mathematics you take something definite as the basis of your reasoning and from it you deduce other equally definite things. There cannot be two answers to a clear-cut mathematical problem.

The next step was for Descartes to find some indubitable philosophical truth from which to deduce by mathematical methods other indisputable philosophical truths. He adopted an old idea—one may doubt beliefs, but one cannot doubt the fact that one doubts. “I think, therefore I exist.” He went on to show that our reasons for accepting this as a truth can be used as a test of other truths. “Whatever is

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clearly and distinctly grasped is true." With this technique he proceeded to prove on mathematical lines certain "truths" that are no longer accepted as such; nevertheless, his method has had a powerful effect on the growth of rationalism, which was then beginning to supersede mediæval dogmatism.

As a scientist Descartes is important. His mathematical genius, which alone would have won for him enduring fame, enabled him to found analytical geometry, which made possible the mathematical discoveries of Newton and Leibnitz. He was an ardent experimenter, and was the first to separate light into its prismatic colours. He also provided a scientific explanation of the rainbow, which men had until then regarded as something of a miracle. In biology, he devised a mechanical explanation of the working of the body, a pioneer conception that has been highly praised by modern scientists.

### *LOCKE*

John Locke (1632-1704) was not only English by birth; he was also very English in his philosophical outlook. He turned his back on artificial and abstract speculations and grappled with the problem of man's capacity for knowing things. His life was uneventful, but his medical skill won him a reputation among the doctors of his time (in after life he was referred to as Dr. Locke, although he did not possess a medical degree) and enabled him to diagnose an illness from which the first Lord Shaftesbury was suffering, thus winning for him the politician's warm friendship.

With Shaftesbury's support Locke might well

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have become one of the shining lights in British politics, but ill-health made him abandon a political career. Later he wrote treatises on government that have been described as the starting-point of modern ideas on democracy. He argued, for instance, that there is a contract between the people and their rulers according to which the government must use its power only for the purpose of increasing the general welfare of the people. If the governing body fails in this it forfeits its right to govern.

After the fall and death of Shaftesbury the Government showed its disapproval of Locke's liberal views, and he took refuge in Holland, where he began to write, comparatively late in life, his outstanding works, all of which are still very widely read. Locke's famous *Essay Concerning Human Understanding*, published in 1690, shows that men's ideas are not inborn but are the result of experience, i.e., of sensation and reflection. His penetrating analysis of knowledge opened up a new field of study. His educational theories, too, are among the most important that have been advanced on the subject. He demonstrated that a child cannot properly acquire knowledge until it has learnt to reason, and maintained that education must primarily be concerned with the formation of right mental and moral habits. Leslie Stephen sums up his life's work by calling him "the intellectual ruler of the eighteenth century."

### LEIBNITZ

The possession of a "universal mind" can rightly be attributed to Gottfried Wilhelm Leibnitz (1646-

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1716), for he excelled in science and philosophy in all their branches, and also distinguished himself in law, the scientific study of history (in which he is a pioneer), theology, engineering, and other subjects. In 1673 he came to England and met Newton and other famous scientists and was made a member of the Royal Society. Later he and Newton became the central figures of a bitter controversy, for both of these mathematical geniuses, working independently, invented the transcendental calculus at about the same time. Leibnitz published his method in 1784; Newton published his in 1793, but claimed to have invented it thirty years earlier. Newton's priority is now recognised, but Leibnitz's method has had a bigger influence on the history of mathematics.

Leibnitz opposed Locke's view that our ideas are limited by our experience (one of his chief works is a criticism of Locke). He argued that the mind itself is not produced by outside influences; there must be a mind before the senses could give rise to ideas. Kant, another famous German philosopher, developed this question in the eighteenth century. Leibnitz, however, went on to explain the basis of knowledge by means of his philosophy of Monadism. Arising out of Monadism is Leibnitz's doctrine of a pre-established harmony governing all things. "All is for the best in the best of all possible worlds." This is the key-note of Leibnitzian Optimism, which Voltaire was to attack so amusingly and effectively in *Candide* and other tales, but Monadism itself is one of the foundations on which philosophers have built during the past two centuries.

Leibnitz is one of an important galaxy of philoso-

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phers with differing aims who lived in the seventeenth century. Locke and Descartes belong to this group. Spinoza (1642-77), a Portuguese Jew who was inspired by Descartes' writings, is another member of it. He produced an exalted philosophy identifying the universe with God that had a powerful influence on later thinkers, including the poets Goethe and Wordsworth. In his day his views were condemned as being atheistic. With him must be named Hobbes (1588-1679), whose *Leviathan* contains an outstanding theory of "Man and the State," and who moulded later philosophies largely by reason of the opposition he provoked. These five men—two Englishmen, a Jew, a Frenchman and a German—in one way or another have left their mark on the world of thought: they form the background of modern philosophy.

### ROUSSEAU

The son of a Genevan watchmaker, Jean Jacques Rousseau became the world's most-potent maker of revolutions. He was born in 1712 and led a wandering life full of extraordinary incidents. He dabbled in music, but he none the less wrote a short opera *The Village Soothsayer* that was the rage in eighteenth-century France. He dabbled in education after receiving a most inadequate education himself, and then produced a book containing epoch-making educational theories. In fact, he was throughout his life a dabbler with an uncanny knack of sometimes succeeding at his self-imposed tasks far better than the trained and accredited experts—which merely shows that he was something of a genius. The whole bizarre



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story of his life is told with a mixture of surprising frankness and vanity in his famous *Confessions*. Many of the episodes that he relates are discreditable, but when reading them we must make allowances for the times in which he lived and remember that he atoned for them by spreading the spirit of humanity throughout the Western world.

This strange man did not begin to write seriously until he had passed middle life, and he made his first bow to the thinking world by writing a prize essay on the theme "Has the restoration of the sciences and the arts contributed to purify manners?" Rousseau took the negative view and supported it with such fervour that his notions created a sensation. Four years later he produced another essay, on inequality among men, and then came a succession of important books: the moralistic *New Héloïse* and *Émile*, dealing primarily with education and incidentally with religion and government—both are in the form of novels—and the treatise *The Social Contract*, in which he fully sets forth his views on government. *Émile* has been described as the starting-point of the ideas that led to the French Revolution, and *The Social Contract* is no less significant: both have brought about peaceful revolutions in men's minds and affairs as well as violent changes in social institutions. Briefly, Rousseau advocates a return as nearly as possible to the state of nature. "Man is naturally good; it is human institutions that make men wicked." He urged, therefore, that all artificiality and pretence should be pared away from society. Every citizen in the community should have an equal status and

## SOME FAMOUS THINKERS

should be protected in the same degree by the community. In education, Rousseau takes the view that formal instruction and book learning are valueless to a child; its mind should be allowed to grow naturally in the same way as its body. The aim of education must be to prepare the child for a full and natural adult life. In his educational theories Rousseau owes a big debt to Locke and his social theories are partly the outcome of ideas taken from other thinkers; nevertheless, there is much of Rousseau himself in them as well.

It was inevitable that his revolutionary ideas should bring him into conflict with the authorities, and at the end of his life, after being harried from country to country he settled in England, where he wrote part of his *Confessions* and developed a "persecution mania" that darkened the rest of his life. He died near Paris in 1778.

### EXERCISES

*Mention three outstanding reforms that can be attributed to seventeenth-century philosophy.*

*Write an imaginary dialogue between Socrates and a twentieth-century Englishman on the admission of women to Parliament, the censorship of the films, or the extension of social services.*